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Abstract

Title of Thesis: Coping Strategies and Perceived Social Support of Primiparous Adolescent Mothers

Karen McClure, Master of Science, 1988

Thesis directed by: Susan E. Hetherington, C.N.M., Dr. P.H.
Professor
Department of Maternal Child Health
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The purposes of this longitudinal study were to: 1) describe coping strategies and perceived social support of adolescent mothers at three points in time; 2) identify changes that occur in coping strategies and social support over time; 3) determine whether changes in social support from the last trimester of pregnancy to one month postpartum are associated with changes in coping strategies from one month postpartum to six months postpartum; 4) determine whether there is a difference between mothers who have contact with the fathers of their babies and mothers who do not have contact with the fathers of their babies in relation to satisfaction with social support; 5) examine the relationship between maternal age and the types of coping strategies most commonly used; and 6) examine the relationship between maternal age and the frequency

of received socially supportive behaviors. Panzarine's Coping with Motherhood scale and an adapted version of Barrera's Inventory of Socially Supportive Behaviors were administered to a convenience sample of 80 mostly black, low socioeconomic status, primiparous adolescents at three intervals: the last trimester of pregnancy, one month postpartum, and six months postpartum. Data were obtained, with permission, from Dr. Panzarine's larger unpublished study of adolescent mothers.

Subjects used coping strategies from the subscales "reappraising the meaning of the situation" and "dealing with the problem itself" most frequently at all three points in time. In general, listed socially supportive behaviors occurred weekly to several times a week, and subjects were satisfied with the frequency of approximately 50% of the behaviors and dissatisfied with the frequency of approximately 50% of the behaviors at each point in time. The use of strategies from the subscales "dealing with the problem itself", "seeking social support", and "reappraising the meaning of the situation" increased significantly from the last trimester of pregnancy to one month postpartum. Changes in the frequency of received socially supportive behaviors from the last trimester of pregnancy to one month postpartum were associated with changes in the use of "relieving tension" and "wishful thinking" coping strategies from one month postpartum to six months postpartum.

Coping Strategies and Perceived Social Support of Primiparous Adolescent Mothers

Karen McClure

Thesis submitted to the Faculty of the Graduate School of the University of Maryland in partial fulfillment of the requirements for the degree of Master of Science

1988

DEDICATION

With love and gratitude,

To

John

my husband, who, through patience, understanding, and support contributed more to this project than he will ever know.

ACKNOWLEDGEMENTS

During the last two years many people have contributed their valuable time and expertise to the successful completion of this thesis. I would like to extend my sincere gratitude to Dr. Panzarine for providing the data on which this study is based, and for expending an enormous amount of time in helping me to complete this project. I would like to express my sincere appreciation to Dr. Hetherington for her guidance and support as the chairman of my thesis committee, to Dr. Parks for her assistance in regard to the statistical analyses and writing of Chapters 3 and 4 of this thesis, and to Ms. Peddicord for contributing her expertise in the field of maternal-child health.

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CHAPTER I: INTRODUCTION

Problem Statement

There are environmental demands that all people must meet in order to survive as a species: providing for nutrition, shelter, care and education of children, division of labor, social organization, health maintenance, and control of disease. In spite of the similarity of these demands, cultures differ in regard to lifestyles and ethnic traditions (Roche & Flynn, 1984).

Although the United States has a diversity of subcultures, central to American culture are core values that include self-reliance, the belief that individuals should work for a living, and an emphasis on material goods and consumerism. The success of individuals and groups is, to a great extent, measured by the possession of material goods, a comfortable lifestyle, the level of education obtained, and occupational status (Roche & Flynn, 1984). These values are made conspicuous by our media.

There are groups of people within our society who, due to a commonality of certain demographics, share distinct disadvantages in achieving success as measured by traditional American values. One group that is especially prone to long-term socioeconomic deprivation are low income adolescent

mothers. Data indicate that adolescent parents more often experience lower education, lower income, and greater marital instability than their contemporaries (Card & Wise, 1978; Furstenberg, 1976). Low income single teenage mothers may even be unable to confront everyday environmental demands, such as providing for adequate nutrition, shelter, care of children, or health maintenance.

The birth of a baby is accompanied by an abrupt acquisition of new roles and tasks with which all new parents must cope. In 1967, Holmes and Rahe developed a life events scale that delineated significant life events and their purported required adjustment demands. Although this tool does not consider all the variables that affect an individual's response to life events, there remains a recognition that significant life events, one being the transition to parenthood, are associated with some form of adaptive or coping behavior. Consequently, low income adolescent mothers must not only confront the socioeconomic hardships that are commonly associated with teen parenting, but also the complex transition of roles and tasks that accompany any birth.

There are many personal and environmental factors that act in concert to influence the way individuals appraise environmental demands, the degree of distress they experience, and the type of strategies they use to cope with stress. These factors include: social position, which is often determined by

race, sex, marital status, and socioeconomic status (Pearlin & Lieberman, 1979); developmental stage, which involves the individual's stage of psychosocial and cognitive development, and their accrued social experiences (Garland & Bush, 1982); self-esteem, locus of control, repertoire of coping strategies (Cohen, 1985); and social support (Cobb, 1985).

Situational factors, which also affect the way an individual appraises and copes with an event, include the duration and nature of the event (Cohen, 1985); the novelty, predictability, and imminence of the experience; the ambiguity of the event; and the timing of the event to the life cycle (Lazarus & Folkman, 1984). Pearlin and Lieberman (1979) studied the relationship between the various life events encountered by a sample of 2300 people representative of the adult population of the Census-defined urbanized area of Chicago, and the level of their subjects' psychological distress. Two major types of life events were distinguished: "normative events which are represented in the gains and losses of major alterations of roles that predictably occur in the course of the life cycle" (p. 220), and nonnormative events that are not easily predictable during the life cycle. Their findings indicated that confrontation with either of these events, and struggles with persistent life strains, are capable of arousing psychological distress.

The birth of a first child, classified by Pearlin and

Leiberman as a normative life event, did not result in significant levels of psychological distress in their adult sample. However, adolescent parenting signifies a role transition that occurs before it is normally expected to in the life cycle, therefore the psychological distress could be expected to be more acute than in adulthood. Also, the categorization of the transition to parenthood as simply a normative life event ignores the duration of stressors that accompany parenthood, and their effects, over an extended period of time.

Currently there are several studies that describe coping strategies used by disadvantaged adolescent mothers to adapt to parenthood (Colletta & Gregg, 1981; Colletta, Hadler, & Gregg, 1981; Panzarine, 1986a). These studies all demonstrated similar findings in regard to the adolescents' use of familial support, problem-focused coping strategies, and emotion-focused coping strategies to moderate the effects of environmental stressors. However there are several issues that were not addressed by these studies.

Although coping is conceptualized by Lazarus as a dynamic process in which a change in strategies would be expected as the context of the situation changed, none of these studies examined coping strategies over a period of time. Additionally, none of these studies examined the proportion of "older" adolescents to "younger" adolescents in the study

samples in relation to the types of coping strategies most commonly used, although the literature suggests that early adolescents often demonstrate cognitive impairments regarding their abilities to solve complex problems. These impairments include "narrowing the range of perceived alternatives, overlooking long-term consequences, and {distorting} expected outcomes" (Hamburg, 1985, p. 127).

Although social support has been frequently associated with adolescent mothers' well-being in the literature (Barrera, 1981; Colletta & Gregg, 1981; Colletta, Hadler, & Gregg, 1981; Furstenberg & Crawford, 1978; Panzarine, 1986a), only Barrera discriminated between perceived support, or the individual's subjective appraisal of support, and received support, or the activities actually involved in the provision of support. Also, although the literature suggests that the help received by adolescent mothers may decline between 8 and 12 months postpartum (Mercer, Hackley, & Bostrom, 1984), no studies exist that examine changes that might occur in coping strategies after a reported decline in supportive activities.

Although the literature suggests that the majority of adolescent mothers stay in contact with the fathers of their babies, and many go on to marry the fathers of their babies (Lorenzi, Klerman, & Jekel, 1977), no data exist that examine whether contact with the father of the baby affects the adolescent mothers' satisfaction with social support. Studies

of adult couples indicate that paternal involvement may have a significant impact on maternal well-being (Brown, 1986).

Adolescent mothers represent a sizable population in our society. A two year study performed by the National Research Council found that almost one million teen-age girls become pregnant each year in the United States, with about 470,000 giving birth and 400,000 obtaining abortions ("World Wide", 1986). Nationally, adolescent pregnancy constitutes 15% of all births, and 25% of nonwhite births (National Center for Health Statistics, 1984). Baltimore has the highest teenage pregnancy rate in the nation for a city its size, with teenage births accounting for 25% of all births ("Orgy Ads Warn", 1986). Fifty-one percent of adolescent mothers in 1980 were single (National Center for Health Statistics, 1987), and 92.6% of adolescent mothers keep their babies (Bachrach, 1986).

Although nurses must be sensitive to the individualistic nature of each human being, and their ability to adapt to a demanding environment, so must we also recognize that particular groups may require closer scrutiny based on the extent of their environmental demands. Given the large proportion of adolescent mothers in our society, and the pervasive, long-lasting psychosocial handicaps that often accompany adolescent childbearing, adolescent mothers comprise a population that demands nursing analysis.

Conceptual Framework

The stress/coping paradigm which guided the development of this study is based on work by Lazarus and Folkman (1984). Psychological stress is a transaction that occurs between an individual and his or her environment when the demands within the environment are appraised as exceeding or taxing the individual's resources and threatening his or her well-being. Stress is part of a multicausal system in which many variables work in concert to produce the relationship. To understand the person-environment relationship, researchers must identify the variables and processes that underlie the relationship.

Cognitive appraisal, an essential concept within this framework, is one of the mediators in the person-environment relationship. Cognitive appraisal is how an individual actually construes an event; it shapes the meaning of the event and subsequently the emotional and behavioral response. It is an evaluative process, one of categorizing an encounter, and its various facets, with respect to its significance for well-being. Primary appraisal is concerned with determining what the stimulus is and the extent of the threat or demand. Secondary appraisal is concerned with what is to be done to manage the situation, and an assessment of available resources. Resources include both personal resources, such as health and energy, positive beliefs, problem-solving skills,

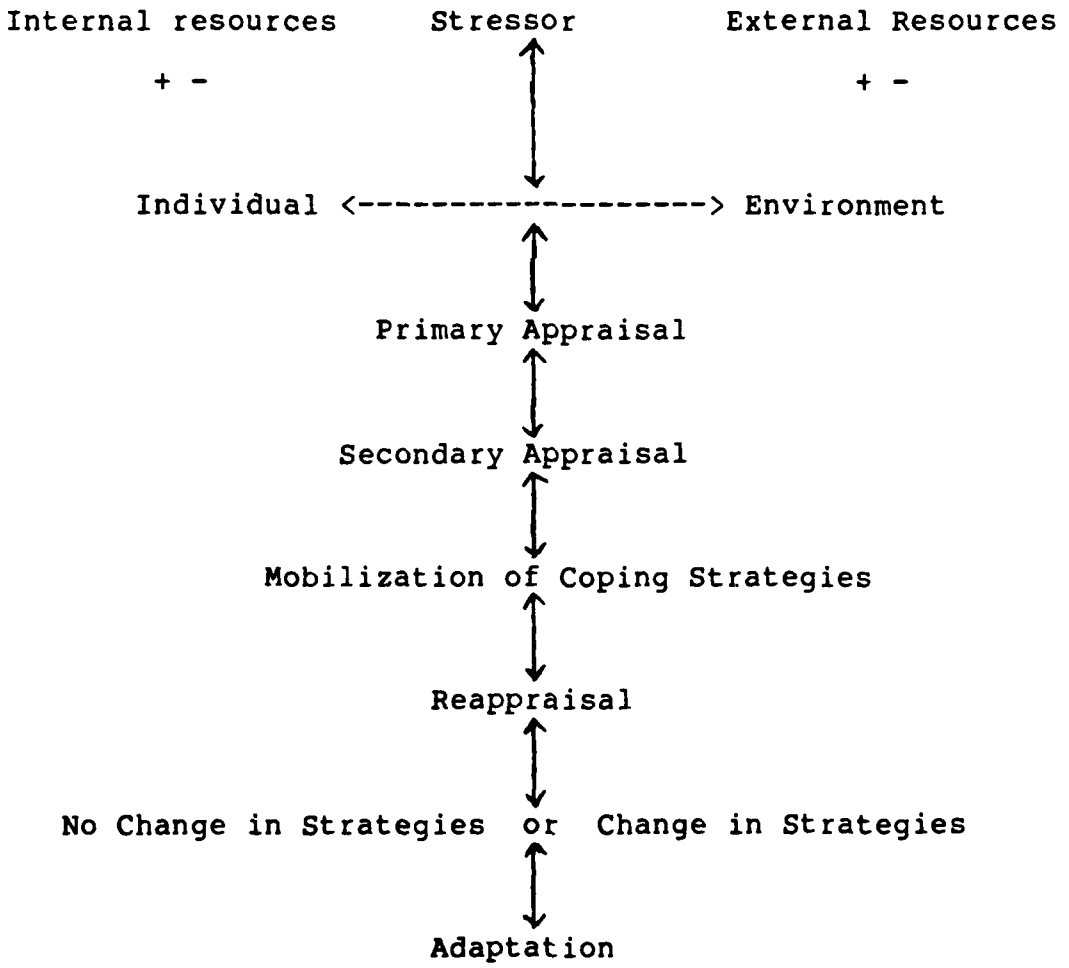
social skills, and social support; and material resources, such as goods and money.

Coping is also conceptualized as a mediator in the person-environment relationship; it is an essential link between stressor impact and adaptation. Coping is described as "constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person" (Lazarus & Folkman, 1984, p. 141). Emphasis is placed on the words "constantly changing" and "specific demands" to reflect the dynamic nature of coping as a process rather than an individual trait or style. As such, coping is conceptualized as what the individual actually thinks or does to manage specific demands within a specific context. As the context changes, so may the individual's method of coping. The word "efforts" is also emphasized which permits the inclusion of any strategy the individual uses to manage the situation, regardless of how well or badly it works.

Coping consists of two types of strategies: problem-focused coping strategies which are intended to change the situation, and emotion-focused coping strategies which are intended to regulate the emotion resulting from the situation. Under the general rubric of these two categories are the domains of defensive coping, information seeking, problem solving, palliation, inhibition of action, direct action, and

by the coping strategies used. Three basic kinds of outcome have been identified: functioning in work and living, morale or life satisfaction, and somatic health. Social functioning over the long term is described as adaptational outcome or an extension of effective coping. A conceptual model based on the work of Lazarus and Folkman is illustrated below.

Stress/Coping Paradigm



Research Questions

The researcher sought to answer the following questions:

1. What strategies are used by low income primiparous adolescents to cope with the demands that are associated with anticipated and actual parenthood?

2. How do these strategies change, if in fact they do, from late in gestation through the first six months of parenthood?

3. Does the frequency of socially supportive behaviors and satisfaction with social support change from the last trimester of pregnancy through the first six months of parenthood?

4. Are changes in satisfaction with social support and the frequency of received supportive behaviors from the last trimester of pregnancy to one month postpartum associated with subsequent changes in coping strategies from one month postpartum to six months postpartum?

5. Is there a difference between mothers who have contact with the fathers of their babies and those who do not have contact with the fathers of their babies in relation to satisfaction with social support?

6. Is there a relationship between maternal age and the types of coping strategies most commonly used?

7. Is there a relationship between maternal age and the frequency of received socially supportive behaviors?

Definition of Terms

Several concepts have been introduced in this first chapter, including coping strategies, change in coping strategies, socially supportive behaviors, change in frequency of received supportive behaviors, satisfaction with social support, and change in satisfaction with social support. For the purposes of this study, it is important that the following terms be operationally defined.

Coping Strategies are defined by Lazarus and Folkman (1984, p. 141), as "constantly changing cognitive and behavioral efforts to manage specific external and or internal demands that are appraised as taxing or exceeding the resources of the person." For this study, coping strategies were assessed by the Coping with Motherhood Instrument (Panzarine, 1986b), which measures how often respondents engage in listed behaviors and thoughts when dealing with becoming a mother or being a mother on a four-point Likert scale ranging from (1) does not apply/not at

all to (4) all the time. The instrument is designed to assess six categories of coping strategies: 1) reappraising the meaning of the situation, 2) dealing with the problem itself, 3) seeking social support, 4) wishful thinking, 5) emotionally detaching and/or avoiding confrontation, and 6) relieving tension through diversion, substance abuse, and/or the expression of anger.

Change in Coping Strategies is operationally defined as any change in a subject's total score on a coping subscale over a designated time period that exceeds one-half of the standard deviation of change for all of the subjects' total scores on the same coping subscale through the same designated time period.

Social Support is defined by Barrera (1981, p. 73) as "activities directed at assisting the individual in mastering emotional distress, sharing tasks, giving advice, teaching skills, and providing material aid." For this study, the adapted version of Barrera's Inventory of Socially Supportive Behavior (Panzarine, 1986b) was used to assess subjects' ratings of how often others have provided listed activities for them during the past month on a five-point Likert scale ranging from (1) not at all to (5) about every day.

Change in Frequency of Received Supportive Behaviors is operationally defined as any change in a subject's total score on the frequency of received supportive behaviors subscale in a designated time period that exceeds one-half of the standard deviation of change for all of the subjects' total scores on the frequency of received supportive behaviors subscale through the same designated time period.

Satisfaction with Social Support is the subjective appraisal of the adequacy of socially supportive behaviors in meeting the individual's needs. For this study, satisfaction with social support was assessed by the adapted version of Barrera's Inventory of Socially Supportive Behavior (Panzarine, 1986b). Respondents are asked whether they would have liked: 1) more of this help, 2) less of this help, or 3) it was about right. A bipolar scale was used to score responses. If responses were either (1) or (2), they were scored as "1", indicating dissatisfaction with support. For a response of (3), a "2" was assigned, indicating satisfaction with support.

Change in Satisfaction with Social Support is operationally defined as any change in a subject's total score on the satisfaction with support subscale in a designated time period that exceeds one half of the standard deviation of change for all of the subjects' total scores on the satisfaction with

support subscale through the same designated time period.

Assumptions and Limitations

One assumption in this study is that there are stressors with which the adolescent mother must cope. A limitation is that a nonrandom homogenous sample was used which prevents generalizability of findings to other populations. Another limitation is that there was no attempt to identify variables, other than changes in satisfaction with social support and changes in the frequency of received supportive behaviors, that may have been associated with changes in coping strategies. Similarily, no attempt was made to identify variables, other than maternal age, that may have been associated with the types of coping strategies most commonly used.

Another limitation was that no attempt was made to identify variables, other than maternal age and maternal contact with the father of the baby, which may have been associated with satisfaction with support and/or frequency of received supportive behaviors. Also, since the adapted Inventory of Socially Supportive Behaviors is a measure of global support, it is unable to discriminate between specific types of received socially supportive behaviors such as intimate interaction, material aid, guidance, physical assistance, feedback, and social participation.

Hypotheses

1. Due to the dynamic nature of coping, coping strategies used by individuals will change from the last trimester of pregnancy through the first six months postpartum.

2. The frequency of received socially supportive behaviors and satisfaction with social support will change from the last trimester of pregnancy through the first six months postpartum.

3. Changes in satisfaction with social support and the frequency of received socially supportive behaviors from the last trimester of pregnancy to one month postpartum will be associated with changes in coping strategies from one month postpartum to six months postpartum.

4. There is a difference between mothers who have contact with the fathers of their babies and mothers who do not have contact with the fathers of their babies in relation to satisfaction with social support.

5. There is a relationship between maternal age and the types of coping strategies most commonly used.

6. There is a relationship between maternal age and the frequency of received socially supportive behaviors.

Significance of Study for Nursing

Nursing is defined by the American Nurses' Association (A.N.A.) as "the diagnosis and treatment of human responses to actual or potential health problems" (1980, p. 11). One of the central themes used by nurse scholars to explain what they conceive to be the essence of nursing is nurses' concern with the patterning of human behavior in interaction with the environment in critical life situations (Donaldson & Crowley, 1976).

Nurses have long been aware that mans' interaction with a threatening or demanding environment often results in a state of physical and mental disequilibrium, and that prolonged interaction with these demands, without the mobilization of adaptive strategies, may result in a loss of health. This was demonstrated as early as the mid-nineteenth century when Florence Nightingale referred to environmental factors that affected the patients' healing process and health. Many nurse theorists have since incorporated stress, coping, adaptation, and related concepts into their conceptual frameworks to explicate their beliefs about man, environment, health, and nursing (King, 1968; Neuman, 1972; Roy, 1970).

The birth of a first child is a major life event that forces new parents to adopt new roles and tasks. Adolescent mothers, who represent a significant proportion of our society, frequently encounter socioeconomic demands as well, including

economic, educational, and occupational deprivation, and marital instability. Based on Lazarus's conceptual framework, the strategies that these young mothers use to cope with their demands will play a significant role in how well they function in their maternal roles and other areas of work and living. Before nurses can identify and foster the types of coping strategies that will facilitate growth and mastery in the maternal role, it is essential that we first become familiar with the strategies used by adolescent mothers to cope, and recognize the factors that affect coping efforts. Therefore, research that examines coping strategies used by adolescent mothers, and some of the factors that may affect the use of coping strategies, is indicated to enhance nursing research and practice.

CHAPTER II: THEORETICAL FRAMEWORK AND LITERATURE REVIEW

Theoretical Framework

Historically, investigators have approached the concept of stress from psychoanalytical, learning and behavioristic, biological, and sociocultural perspectives. Nursing theorists have also developed several conceptual models that incorporate stress, coping, and adaptation in relation to man, the environment, and health. This study of adolescent mothers' coping strategies and their perceived social support was guided by Lazarus's cognitive-phenomenological framework of stress and coping. Each of these perspectives will be discussed to provide sufficient theoretical background for this study.

Initially, anxiety was a concept used by theorists to define and analyze individual responses to threatening internal and external stimuli. In 1926, Sigmund Freud proposed two types of anxiety, signal and traumatic. Signal anxiety was defined as an ego function which alerts individuals to sources of impending danger so that they can react in an adaptive way. This type of anxiety always included an "outside referent", something in the external environment believed to be real. Traumatic anxiety was defined as a discharge of libidinous energy, and its major psychodynamic functions were described as helping the individual avoid conscious recognition of

unacceptable instinctual impulses and allowing indirect impulse gratification through mobilization of ego defense mechanisms. Other psychoanalysts further articulated or refined Freud's Anxiety Theory, mainly in terms of theoretical considerations concerning the extent of anxiety as a response to a danger situation; the extent of anxiety produced by the frustration of an internal or external instinct or drive; whether anxiety should be regarded as a subjective awareness of instinctual tension; and the extent to which anxiety represents a mode of instinctual discharge (Compton, 1980).

Learning and behavioral theories of anxiety differ from psychoanalytic theories in respect to their focus on proximal rather than distal stimuli. Psychoanalytical theory focuses on anxiety or avoidance behavior as a result of intrapsychic conflict, which is referred to as distal stimuli. Learning and behavioral theorists describe anxiety and avoidance as elicited responses to some immediately preceding (proximal) internal or external stimulus, and these responses are maintained by reinforcing circumstances (Bootzin & Max, 1980).

Pavlonian conditioning was used to demonstrate learned anxiety acquisition through the pairing of known (conditioned) to neutral (unconditioned) stimuli. Although early Pavlonian models assumed that all stimuli had equal potential for producing a conditioned response, studies demonstrated that only some stimuli actually become associated with reflexive

responses in humans. Seligman (1971) proposed that people have a biologic predisposition or preparedness to learn to respond to certain conditioned stimulus-unconditioned stimulus (CS-UCS) pairs, and these are easily acquired because they are essential for the survival of the species. More recent modifications of Pavlonian theory emphasize cognitive processes, such as information processing, rather than association through repetition (Bootzin & Max, 1980).

Biological theories of stress and adaptation were introduced by Cannon in 1929 when he described the fight or flight phenomenon, notably the activation of the sympathetic adrenal-medullary response in emergency situations. He also proposed the name "homeostasis" to describe the coordinated physiologic processes which maintain most of the steady states of the organism (Cannon, 1953).

In the 1930's, Hans Selye became the first researcher to seek to describe and analyze the effects of the concept referred to as "stress", which he described as "the nonspecific result of any demand upon the body, be the effect mental or somatic" (1985, p. 17). Stressors were described as the agents or demands that evoke the patterned response. Selye developed the General Adaptation Syndrome (GAS) theory, which was based on objective indicators such as bodily and chemical changes, to explain the series of physiologic stages an individual progresses through during a stress response.

Sociocultural theories of subjective distress are distributed between two broad classes; those asserting direct relationships between mutually influential characteristics of the sociocultural system and those asserting relationships between said characteristics and other personally relevant characteristics (Kaplan, 1980). It has been proposed that the extent of socially induced stress in a population is inversely associated with the stability of its social relationships; the stability of a population's social relationships is positively related to its members' conformation with socially sanctioned demands; and when members conform to social demands, role conflict is reduced. When this occurs, members of a population are said to occupy statuses that are compatible to their roles, and compatible statuses are positively associated with status integration. This is an example of the first class of theories (Dodge & Martin, 1970).

Kemper's theory (1978), also within this class, treats subjectively distressful emotions as deriving from patterns of excess or insufficient power and status within social relationships. More recent sociocultural theories, in addition to addressing the distress-inducing influences of sociocultural systems, have incorporated a number of other elements including need-value systems, life events, and coping mechanisms (Kaplan, 1980).

All of these theories have in common a linear causality

approach to stress and stress effects. They focus on antecedent internal and/or external stimuli, and subsequent biological or emotional responses. Cognitive processes such as how subjects construe tneir ongoing transactions with the environment, psychological processes involved in how they cope, and the kinds of coping strategies involved, are inferred, although it is these processes that allow some individuals to handle a given stressful event better than other individuals (Coyne & Lazarus, 1980).

In 1966, Richard Lazarus developed a cognitive-phenomenological model of stress and coping. This model emphasized a transactional perspective of stress in which no single order of phenomena dominates the process. In this theory, environmental demands, cognitive appraisal processes, coping, and emotional response are interdependent, each affecting the other (Coyne & Lazarus, 1980). A transactional perspective emphasizes fluctuation and change, therefore timing, sequence, and context are essential when analyzing the process.

Stress is defined as a rubric consisting of many variables and processes. Specifically, psychological stress is defined as "a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being" (Lazarus & Folkman, 1984, p. 19). It is this

person-environment relationship, the context in which it occurs, and the characteristics of the individual that produce conditions associated with stress. To understand the relationship, researchers must identify the variables and processes that underlie the relationship.

Cognitive appraisal represents a critical juncture in the person-environment transaction. How a person appraises a situation will determine how the information is used to shape the course of subsequent events. Lazarus and Folkman (1984) described the cognitive process as largely an evaluative one which occurs continuously during all waking life.

Primary appraisal occurs when the individual scans the environment and evaluates the situation in terms of his or her well-being. The situation is appraised as either irrelevant, benign-positive, or stressful. If the stimuli is appraised as stressful, further appraisal occurs which determines whether harm has already occurred; the threat has not yet occurred but the environment is hostile and the individual lacks necessary resources to master it; or the situation is challenging in which case the opportunity for growth, mastery, or gain is present or available resources are adequate to master it.

Secondary appraisal is a complex evaluative process; it is the person's ongoing judgments concerning coping resources, options, and constraints. The difference between primary and secondary appraisal is the content of what is being appraised.

Secondary appraisal involves the evaluation of coping strategies with respect to their cost and probability of success (Lazarus & Folkman, 1984).

Cognitive appraisals are not static, but rather shift in response to changing internal and external conditions. Lazarus and Folkman (1984) identified many personal and situational factors that interact to influence the cognitive appraisal of an individual. Personal factors include the individual's commitments, or the extent to which an individual perceives a particular event as important; and beliefs, or personally formed or culturally shared preexisting notions about reality which serve as a perceptual lens. Beliefs include the individual's belief about personal control, such as their feelings of mastery and confidence; and existential beliefs, such as faith in God, fate, or some natural order in the Universe. These personal factors color the way a person evaluates what is happening or about to happen.

Situational factors include the novelty of the event, or situations with which the person has not had previous experience; and the predictability of the event, which influences the individual's ability to anticipate, prepare for, and subsequently reduce the averseness of the stressor. Timing of the event in relation to the life cycle may also be a significant situational factor. Neugarten (1979) suggested that people have a concept of the normal life cycle which

includes expectations about when certain events are supposed to occur. Pearlin and Lieberman (1979) described life events as normative, those events that are expected and regular in their occurance in the life cycle, and nonnormative, those events that are unpredictable in the life cycle. Normative events, such as pregnancy and parenthood, are not in themselves crises, but their timing in the life cycle may be perceived as crises. Nonnormative life events, such as divorce or loss of employment, are often perceived as crises since they are unpredictable in the life cycle.

Other situational factors may be temporal in nature, such as the imminence of the event, the duration of the event, and the uncertainty of the event. Cohen (1985) identified four types of stress based primarily on their duration: 1) acute time-limited events, 2) stress event sequences in which one particular event initiates a series of different events, 3) chronic intermittent stressors that may occur once a day, once a week, or once a year, and 4) chronic stress conditions which may or may not be initiated by a discrete event.

All of these factors affect the intensity of the appraisal and the ability of the individual to evaluate what is at stake, its significance for well-being, and what, if anything, can be done. However, in most human encounters, the information needed to make these evaluations is insufficient, therefore the situation is described as ambiguous. The greater the ambiguity

surrounding an event, the more influential are personal factors in determining the meaning of the situation (Lazarus & Folkman, 1984).

An understanding of the human thinking processes is important to the cognitive-phenomenological framework in this study. Posner, in 1973, identified two major components of thinking and reasoning ability; mental structure and mental operations. Mental structure includes short and long term memory systems and their codes, and the capacity for abstraction and concept formation. Mental operations are reversible mental transformations, or the dynamic components of thinking and reasoning. They include the tools of symbolic logic such as deduction, inference, evaluation, and perception; levels of consciousness which facilitate both sensory and motor systems; and problem solving, or the global process by which a person moves from problem identification to solution and evaluation. Formal operations, which involve the ability to reason hypothetically and independently of concrete objects, represent a higher level of cognitive development than concrete operations.

Piaget (1976) suggested that formal operational reasoning, or the capacity to consider and examine possibilities that are not immediately present, is generally established between the ages of 12 and 15 years. However, empirical data suggest that "a rather large percentage of individuals of normal

intelligence and of average social background, not only at the age of adolescence but also in adulthood, do not seem to function at the formal operational stage" (Blasi & Hoeffel, 1977, p. 348).

The primary difference between concrete and formal operational reasoning is not found in the solutions to problems, but the style to which problems are approached. Blasi and Hoeffel (1977) suggested that concrete reasoning may be no less effective than formal operational reasoning in terms of adaptation to everyday reality and its practical demands. More important may be the individual's repertoire of personal and social experiences, for if these life experiences are rich and varied, they can provide a fount of education and insight necessary to find practical solutions to many problems.

As such, problem-solving skills will generally increase steadily and impressively as the adolescent matures and is exposed to a variety of situations. However, the adolescent who lacks acquired experience or has had limited social interactions may not have an extensive repetoire of skills with which to identify and solve situational problems. This deficiency may be exacerbated if an adolescent is incapable of hypothetical reasoning. Hamburg described ways that young adolescents have demonstrated cognitive impairments related to problem-solving: "...narrowing the range of perceived alternatives, overlooking long-term consequences, and

{distorting} expected outcomes" (1985, p. 127).

Another essential mediator in the person-environment transaction is the coping process. Coping is defined as "constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person" (Lazarus & Folkman, 1984, p. 141). Emphasis is placed on the words "constantly changing" and "specific demands" to reflect the dynamic nature of coping as a process rather than an individual trait or style. As such, coping is conceptualized as what the individual actually thinks or does within a specific context; as the context changes so may the individual's method of coping.

There are multiple functions of coping but the definition does not incorporate, nor should it be confused with, adaptational outcome. "Coping function refers to the purpose a strategy serves, outcome refers to the effect a strategy has" (Lazarus & Folkman, 1984, p. 149). This description of coping emphasizes the word "efforts" which permits the inclusion of any strategy the individual uses to manage the situation, regardless of how well or badly it works.

Coping functions are more than just efforts to solve a problem. Lazarus suggested that coping consists of two types of strategies: those intended to change the situation, and those intended to regulate the emotion resulting from the situation. Problem-focused coping strategies are intended to

define the problem, generate solutions, weigh the cost-benefits of alternatives, choose the best alternative, and take action. Emotion-focused coping strategies are intended to reduce emotional distress, and may include cognitive processes such as "avoidance, minimization, distancing, selective attention, positive comparisons, and wresting positive value from negative events" (Lazarus & Folkman, 1984, p. 150); and direct action, which may involve relieving tension through physical activity, diversion, substance abuse, or the expression of anger.

In general, individuals are more likely to use problem-focused coping strategies when harmful or challenging environmental conditions are appraised as being amenable to change, and emotion-focused coping strategies when they perceive that nothing can be done to modify said conditions. Under the general rubric of these two categories are the domains of defensive coping, information seeking, problem solving, palliation, inhibition of action, direct action, and magical thinking.

The way people actually cope depends heavily on their available personal and material resources. Among these resources are mastery and self-esteem (Pearlin & Schooler, 1978), locus of control (Anderson, 1977), health and energy, positive beliefs, problem solving skills, social skills, social support, and material resources such as money and goods (Lazarus & Folkman, 1984).

Social support has long been considered a critical resource to protect individuals against the health consequences of life stress (Cobb, 1976; Schradle & Dougher, 1985). Several approaches have been used in the literature to define social support and analyze its effects on stress and coping.

In 1974, Caplan emphasized both emotional and cognitive support as well as tangible assistance in his conceptual definition of social support. Cobb, in 1976, identified three broad categories of social support: "1) Information leading the subject to believe that he is cared for and loved; 2) Information leading the subject to believe that he is esteemed and valued; and 3) Information leading the subject to believe that he belongs to a network of communication and mutual obligation" (p. 300). Hirsch, in 1979, included cognitive guidance, social reinforcement, tangible assistance, socializing, and emotional support in his conceptual definition. Barrera, in 1981, expanded upon Hirsch's definition of social support and included material aid, physical assistance, intimate interaction, guidance, feedback, and social participation.

Operationalization of social support has been approached from three perspectives: 1) perceived social support, or the individual's subjective appraisal of support; 2) received social support, or the activities actually involved in the provision of support; and 3) the providers of support

(Antonucci, 1985; Barrera, 1981; Wethington & Kessler, 1986). Current research has not established whether one of these dimensions of support is a more effective buffer against stress than the others, although Antonucci (1985) suggested that the perceived quality of support may be more important than the quantity of supportive activities provided. Therefore, this study utilizes Barrera's (1981) multimethod approach to examine both the quantity of supportive activities received by adolescent mothers' and their subjective appraisal of support.

Nurse theorists are primarily concerned with the diagnosis and treatment of human responses to actual or potential health problems. Nurses' concern with health problems resulting from mans' interaction with the environment was first demonstrated by Florence Nightingale when she described the environment as "those elements external to, and which affect, the healthy or sick person" (cited in Reed & Zurakowski, 1983, p. 14). King (1968) described man as an open system permitting exchange of energy with the environment, and health as a dynamic adjustment to stressors in the internal and external environment. Neuman (1972) defined nursing as being concerned with all the variables affecting an individual's response to stressors.

Roy (1970) published a conceptual framework for nursing based entirely on adaptation, drawing from the work of physiologists, psychologists, and other nurse theorists. She described man as a biopsychosocial being lying at some point

along the health-illness continuum, interacting constantly with a changing environment, and having a variety of stimuli acting on him. Adaptation is conceptualized as both a process and a product. The product is an end state of dynamic equilibrium. The process consists of adaptive responses that promote integrity of the person in terms of survival, growth, reproduction, and self-mastery (Tiedeman, 1983). Nursing is defined as the activities directed toward assisting the patient, who is responding to the stimuli present because of his position along the health-illness continuum, achieve an adaptive state, which frees him to respond to other stimuli (Roy, 1970). The work of Nightengale, Neuman, King, Roy, and many other nurse theorists illustrate nurses' recognition of man as a biopsychosocial being, nurses' concern with identifying human responses to demands within the environment, and nursing goals to assist man achieve maximum growth and potential as he interacts with a demanding environment.

Review of the Literature

There has been much theoretical discussion of stress associated with parenting. In the past, the birth of a first baby was conceptualized as a critical life event, one fraught with stressors to which the new parent had to adapt. Although childbirth is no longer considered a crisis, it is still

considered a major life event which incurs a whole new set of demands on the parents. Earlier studies were usually concerned with the transition to parenthood of married middle-class adults. Currently there are several studies that examine stress and coping associated with adolescent parenthood.

Both LeMasters (1957) and Dyers (1963) conceptualized the birth of a first child as a potential crisis, which was defined by Reuben Hill (cited by Dyers) as "any sharp or decisive change for which old patterns are inadequate; ... a situation in which the usual behavior patterns are found to be unrewarding and new ones are called for immediately" (p. 197). LeMasters found in his study of 46 middle income couples that 83% experienced structural changes within the family that required drastic reorganization of roles and relationships, regardless of the quality of their marital relationship. Dyers' findings demonstrated that 91% of the 32 couples he studied experienced at least moderate crisis with the event of a first birth. Both of these studies employed small samples and nonrandom sampling techniques.

Hobbs, in 1965, used a random sample of 53 young married couples who represented a broad range of economic, educational, and occupational statuses, to study the effects of a first childbirth on the family. He found that only 13% of the couples experienced moderate to severe crisis with the birth. He also discovered that, in spite of the interruption of

routine habits, feelings of tiredness and fatigue, and increased financial concerns, 91% of the husbands and 70% of the wives actually reported that their marriages were happier and more satisfying since the birth, and 70% of both sexes reported feeling wonderful and happy the first time they saw the baby. Hobbs suggested that the rewards that accompany a birth may be considered sufficiently compensatory so that few serious problems are reported. He also suggested that a "honeymoon" period exists when parents are initially elated with parenting experiences, but after four to six weeks the impact of parenthood becomes a more stressful experience.

In 1968, Rossi suggested that the term "crisis" be dropped altogether in relation to birth since the transition to parenthood is generally considered a normal event. Russell, in 1974, described the behavioral changes required by new parenthood as extensive, but also suggested that due to the large number of gratifications reported, most new parents are only slightly bothered by these changes.

Hrobsky (1977) described the event of birth as a period of reorganization within a family's development with subsequent intensification of feelings of intimidation and invigoration, along with pressure to reorder stabilizing functions, and a testing of the skills required to juggle the needs of the various family members. She described an anticipatory phase, when couples initially define roles and responsibilities within

the family, and the subsequent redefinition of roles and responsibilities that must occur with the advent of a birth.

Miller and Sollie (1980) also described the transition to parenthood as an abrupt acquisition of new roles and tasks. They measured the personal well-being, personal stress, and marital stress at three points in time of 120 new parents, most of middle socioeconomic status. First measures were obtained at six months of pregnancy; the second measures were obtained at one month postpartum; and the last measures were obtained at eight months postpartum. Findings demonstrated an increase in maternal reports of both personal and marital stress by eight months postpartum, with a slight decrease in personal well-being. Fathers reported a slight decrease in personal well-being, but no significant changes in personal or marital stress. The researchers suggested that "the typical new parenthood experience includes a slight to modest decline in personal well-being and some increase in personal stress over the first year or so of parenting" (Miller & Sollie, 1980, p. 462). These findings support Hobbs' (1965) suggestion that a "honeymoon" period exists after the birth of a baby.

In 1981, Weinberg and Richardson performed a study to assess dimensions of stress in early parenting and determine the most prominent differences in these dimensions according to specific demographic characteristics. Forty completed questionnaires were returned by volunteers who were, for the

most part, of mid-to-upper socioeconomic status, employed full-time, and married. Questionnaires consisted of a list of 14 experiences associated with parenting that are considered stressful, and eight bipolar adjective scales to rate these experiences on their most distinguishing aspects of unpleasantness. Despite the relatively small sample size, when the dimensions were weighed to reflect the importance of the dimensions to the individuals, dimension weights were systematically related to several demographic characteristics. Findings implied that parents are most concerned with the management of immediate problems with the child, such as illness and difficulty in getting the child to sleep. Problems of enduring nature, such as financial burdens and relations with in-laws, were less likely to cause distress, although this sample was not representative of lower income parents. The authors suggested that immediate problems short-circuit the opportunity for cognitive appraisal processes to function in terms of identifying coping resources and strategies.

Bennett (1981) used convenience sampling to examine the responses of 78 newly parous women to open-ended questions concerning their experiences during the puerperium. The sample represented all levels of socioeconomic status. Age range was from 20-32 years with a mean of 24.9 years. The information elicited included the help they had found they needed in coping with their babies, changes in life-style, kinds of previous

experience with childcare that proved helpful, and ways in which the father of the baby could assist. Subjective ratings of activities most important to new mothers in the early puerperium included guidance, physical assistance, feedback, and intimate interactions. Items considered most troublesome after the birth of a baby included sleep disturbance, new responsibilities, the baby crying, and lack of freedom. The life style change considered most significant was the baby as a great new source of joy, but negative significant changes included being "on call" 24 hours a day, restriction of social life, and giving up work.

In 1983, Crnic, Greenberg, Ragozin, Robinson, and Basham examined the effects of stress and social support on 52 mothers with premature infants and 53 mothers with full-term infants. Maternal life stress, social support, life satisfaction, and satisfaction with parenting were assessed one month after the birth. Behavioral interactions were assessed at four months after the birth. No group differences were found, but stress and support significantly predicted maternal attitudes at one month and behavior interactions at four months. The authors stated: "Mothers with greater stress were less positive in their attitudes and behavior, while mothers with greater support were significantly more positive. Intimate support proved to have the most general positive effects" (Crnic, Greenberg, Ragozin, Robinson, & Basham, 1983, p. 209).

Another potential source of postpartum stress, changes in sexual relationships, was examined by Fischman, Rankin, Soeken, and Lenz (1986). They studied 68 middle income couples at four months postpartum, and 126 couples at 12 months postpartum, to identify perceived changes in intimacy and sexuality. Seventy-eight percent of the couples studied were primiparous. Findings demonstrated that the majority of mothers at four months postpartum experienced more discomfort with sexual intercourse, less frequency of sexual intercourse, and less satisfaction with appearance than prior to the birth. A disparity existed between mothers and fathers reported desire for sexual activity, with fathers reporting significantly less changes in desire than mothers. Although maternal desire for, and frequency of, sexual activity increased over time, major disruptions persisted up to one year after the birth.

In 1986, Brown investigated the effects of social support and stress on the health of both expectant mothers and fathers. Three hundred and thirteen couples representing all economic levels were assessed in relation to support behaviors, which included satisfaction with partner support and satisfaction with others support; health, measured as a broad multidimensional construct ranging from lack of illness symptoms to quality of life; and amount of stressful events experienced. Satisfaction with partner support explained the largest variance in health, but satisfaction with partner

support, stress, and history of chronic illness all contributed significantly to the variance in health.

Several important considerations are evident in this review of the literature. Primarily, the birth of a first child, although no longer considered a crisis, remains a major life change with many inherent potential stressors. Included in these stressors are the new tasks and responsibilities that accompany childbearing and the reorganization of roles and relationships within the family structure. Social support, especially satisfaction derived from partner support, appears to be extremely important in relation to parental health and maternal role adaptation.

Theoretically, the adolescent mother is especially vulnerable to stress associated with parenting. In addition to the normal demands that accompany parenthood, the adolescent mother must also continue to master adolescent tasks of establishing adult identity, trying to assert independence from parents, establishing sexual identity, forming intimate relationships, and planning future occupational goals (Erikson, 1968).

Panzarine listed stressors that adolescent mothers must often cope with "...childcare and childcare arrangements; relationships with the father of the baby, their parents, and peers; employment and finances; school; living arrangements; health; body image; insecurity about their new roles; and

restricted time for self and activities" (1986a, pp. 1153-1154). Exacerbating the situation are the adverse, long-lasting, and pervasive social and economic repercussions that seem to accompany the role of adolescent parent: less education, lower paying employment, and less stable marital relationships than contemporaries; and more children than they desire (Card & Wise, 1978; Furstenberg, 1976).

Colletta and Gregg (1981) performed a study to determine situational and individual variables which modified the emotional stress experienced by a group of 64 black adolescent mothers. There were four factors examined to determine the cause of variation in young mother's reactions to stress: 1) self-esteem; 2) locus of control; 3) presence of a support system; and 4) coping style. A sample was obtained by taking names of potential subjects from lists of high school personnel involved in administering programs for young mothers. There were three groups of girls. The first group of 25 subjects were high school students that were also involved in the Baltimore City Public Schools Infant-Parent Program. This program was designed to provide infant day care and parenting skills to students who returned to school after the birth of the baby. The second group consisted of 25 subjects who were high school students but were not involved in the parent-infant program. The third group consisted of 14 girls who had dropped out of high school. The three groups did not differ

significantly on major demographic characteristics. They were all black, between the ages of 14 and 19 years old, had one child two years of age or younger, and were not married at the time of the study.

Interviews with the subjects were designed to elicit the mothers' perceptions of social and institutional factors that influence daily functioning; coping responses to specified problem categories; self-esteem; locus of control; and emotional responses to certain problem categories. The determined problem categories included child care arrangements, living arrangements, employment, school, relationship with peers, relationship with parents, housework and errands, health, finances, community services, and child care information.

A stepwise multiple regression analysis was performed. Emotional stress was the dependent variable and the predictor variables were total support, self-esteem, coping style, and locus of control. Forty-one percent of the variance in emotional stress was explained by three of the predictor variables, with the greatest degree of variance explained by total support ($p<.001$). Adolescent mothers who received high levels of support were more likely to report low levels of emotional stress than adolescent mothers who received low levels of support. Self-esteem explained the second largest degree of variance, indicating that mothers with high levels of

self-esteem were more likely to report less emotional stress than mothers with low levels of self-esteem ($p<.01$). Coping style also explained significant variance ($p<.05$) with those mothers who used direct action problem-focused strategies reporting less emotional stress than mothers who used emotion regulation as their coping strategies.

Colletta, Hadler, and Gregg (1981) analyzed the same data in another article to measure coping responses used by adolescent mothers, to correlate determined variables to the type of coping response used, and to examine the relationship between coping strategies and emotional stress. The results of this data analysis demonstrated that the greatest concern of these young mothers in the interpersonal category was their relationship with peers. Slightly more than half reported feeling pressures related to childcare. Only a few reported conflict with parents.

The data also demonstrated that most of the mothers were fairly positive about their ability to deal with task-oriented problems such as housework and errands. There was moderate concern about illnesses, serious concern about finances, and a slight majority were satisfied with the amount and quality of assistance from community services.

Data on the mothers' coping responses to the 11 problem areas suggested the majority of these adolescent mothers used avoidance when faced with interpersonal problems, such as

reducing the amount of time spent with the source of stress. In relation to task-oriented problems, the adolescents were more likely to use a direct method approach, such as appraising and solving the problem. Educational problems were usually dealt with by redefining the problem; and the method for dealing with occupational problems was equally distributed between redefining the problem, avoiding the problem, and direct action.

Correlations between coping style and variables such as self-esteem, sense of control, total support, and total stress demonstrated that there was a significant positive relationship between total support and use of direct action coping ($p<.001$), and a significant negative relationship between total stress and use of direct action coping ($p<.001$). There was a slightly weaker positive correlation between self-esteem and use of direct action coping ($p<.05$). Sense of control was not significantly correlated to the type of coping strategies used.

One limitation of these studies (Colletta & Gregg, 1981; Colletta, Hadler, & Gregg, 1981) was the use of nonrandom sampling which is subject to sampling bias. In addition, interviewing was used to collect data which introduces the risk of subject reactivity to the interviewer. Another limitation was the conceptualization of coping as a style rather than as constantly changing efforts or strategies to manage specific demands. Also, there was no attempt to discriminate findings

based on age, although the younger adolescent, with a smaller repertoire of problem-solving skills, may utilize different methods of coping.

Panzarine (1986a) performed a study to describe adolescent mothers' perceived stressors, coping strategies, and social supports. Coping strategies were conceptualized as having two functions: dealing with the problem and managing stress-related emotion. Thirty-four subjects were recruited from three urban hospitals. The subjects were all mothers who were 18 years old or less, primiparous, and planning to keep the baby. They all had full term infants who weighed 2500 grams or more, had received an Apgar at five minutes of 7 or more, and had no major congenital or health problems.

Interviews were performed by the investigator, and after an initial hospital visit to establish rapport, home visits were made at two and four weeks post discharge. Interviews were taped and consisted of open-ended questions. During the initial home visit the mother was asked to describe her experiences, discuss concerns, and if stressful situations were identified, to describe methods of dealing with the situation and type of thoughts experienced in response to the situation. The mothers were also asked to describe their behaviors and thoughts in response to the feelings of distress associated with the difficult situation.

During the second home visit, the investigator used the

same format as before. In addition she broached other areas of concern, such as child care responsibilities and peer relations. If any of these areas were identified as a problem by the adolescent, she was asked again about her coping strategies. The four week interview consisted of the administration of Hirsch's Social Support Scale and the assessment by the investigator of the adolescents' tangible, emotional, and cognitive support; social reinforcement, and socializing. The data were transcribed and general categories developed of the identified stressors.

In general, Panzarine's findings suggested that the majority of these adolescent mothers were concerned about their interactions with the new baby, child care, health of the baby, their relationship with the father of the baby, additional responsibilities imposed by motherhood, and interactions with family members. Most of the teens experienced tangible support, emotional support, cognitive support, and social reinforcement.

Problem-focused coping strategies were often used, and included seeking assistance with or information about child care, relying on past experiences with child care, exploring alternatives to problems, and a trial and error approach. Anticipatory coping during the pregnancy to plan for potential difficulties after the birth of the child, such as child care and schooling, was described as being a significant strategy

used by many teens.

Emotion-focused coping strategies were also frequently employed and included such behaviors as leaving the stressful environment temporarily for shopping and visiting, consolation with the thought that the baby would be getting older and less troublesome, reminding herself that she had really wanted this baby, thinking of positive aspects of mothering, turning to someone for comfort and reassurance, venting anger to someone close, ignoring certain situations, and accepting certain situations as unchangable.

Panzarine concluded that most of the adolescents in her sample made a smooth transition to parenthood. She identified three major factors that were influential in this smooth transition: the anticipatory coping that many used during the pregnancy to avert problems or minimize their impact; the adolescents' extensive reliance on help from the family; and the prior experience many adolescents in her sample had in caring for infants and children.

Several limitations of Panzarine's study are addressed. Sampling was nonrandom, which could cause sampling bias, and the sample size was relatively small (n = 34). The author provided no information about the reliability or validity of the social support instrument, Hirsch's Support System Scale. The author discussed two additional limitations: 1) the possibility of a large percentage of older adolescents in the

sample, which might effect the degree of distress reported, and 2) the study was performed shortly after the births, which has been conceptualized as a "honeymoon" period for new parents. Also, this study did not address satisfaction with social support although research indicates that the perceived quality of socially supportive activities may be a more effective buffer against stress than the quantity of received socially supportive activities (Antonucci, 1985).

Other studies have also addressed the issues of stress, coping, and social support in relation to adolescent parenting. Zuckerman, Winsmore, and Alpert (1979) discovered that 95% of the unmarried inner-city adolescent mothers in their sample were living with extended families, and that these adolescents perceived and used their families as resources. Furstenberg and Crawford, in 1978, found that the adolescents in their sample who continued to live with their parents and benefit from parental assistance tended to overcome some of the social and economic handicaps associated with adolescent childbearing.

Barth and Schinke (1983) studied 52 pregnant and parenting adolescent women ranging in age from 14 to 19 years old. A test battery of five instruments was administered weekly for three consecutive weeks. Tests included a 48-item difficult situations questionnaire, the Beck Depression Inventory, the State-Trait Anxiety Inventory, a social support scale, a coping

inventory, and a self-efficacy measure that taps students' beliefs in their own effectiveness. The authors found that both social support and a form of emotion-focused coping, referred to as making positive comparisons, moderated the effects of environmental stressors on adolescent parents. However, their coping instrument only assessed two types of coping strategies: ignoring the situation, and making positive comparisons.

Barrera, in 1981, studied the role of social support in the adjustment of pregnant adolescents, and included in his assessment the role of support satisfaction. The Negative Life Events Scale, Social Support Network Indices, Receipt of Natural Helping Behaviors, and Brief Symptom Inventory were administered to a nonrandom sample of 86 primiparous adolescents, with a mean age of 17.2 years. Findings demonstrated that support satisfaction was negatively associated with support need, the measure of stressful life events, and all of the maladjustment symptom dimensions. Although satisfaction with social support and stressful life events did not show significant interaction effects, after controlling for the effects of stressful life events, satisfaction with social support accounted for 13% of the variance in both the total symptom and depression subscale scores.

In general, the studies of pregnant and parenting

adolescents cited throughout this literature review suggest that adolescent mothers use both problem-focused and emotion-focused strategies to cope with the demands that are associated with the transition to motherhood. The types of coping strategies used may even affect the degree of distress experienced by these young mothers, although there is diversity in the literature regarding the nature of these coping strategies. In addition, the quantity and/or quality of support that is received during this transition, especially from family members, appears to play an important role in the degree of distress reported by adolescent mothers.

The studies presented did not address several important issues. Primarily, since coping is conceptualized as a dynamic process, and strategies are expected to change as the context of the situation changes, the most obvious deficiency in current literature is a description of changes that occur in adolescent mothers' coping strategies over the course of time. One assumption might be that as the mother grows more confident in her maternal role, her use of problem-focused strategies would increase over time and her use of emotion-focused strategies would decrease over time. On the other hand, since social support is considered a critical aspect of stress and coping in relation to maternal well-being, and the literature suggests that adolescent mothers experience a decline in social support over the first year of parenthood, an assumption might

also be that the use of emotion-focused strategies would increase as social support declined.

Research demonstrates that adult mothers rely heavily on support from their partners, and that the majority of adolescent mothers have regular contact with the fathers of their babies. These findings suggest that adolescent mothers who have contact with the fathers of their babies will report greater satisfaction with social support than adolescent mothers who have no contact with the fathers of their babies, but no research exists that measures the effect of contact with the babies' fathers on adolescent mothers' satisfaction with social support.

The literature also suggests that younger adolescent mothers may have less extensive problem-solving skills than older adolescents, which implies that younger adolescents would tend to use more emotion-focused coping strategies than problem-focused strategies, but there are no studies that examine specific ages in relation to the types of coping strategies used. It also seems probable that younger adolescents would receive more socially supportive behaviors than older adolescents, but this has not been addressed in the literature. Analysis of these unexamined variables, all of which may be important components within the stress/coping paradigm as it pertains to adolescent mothers, is indicated to enhance nursing knowledge and practice.

CHAPTER III: METHODOLOGY

Research Design

The methods employed in this longitudinal study were designed to: 1) describe the coping strategies and perceived social support of a sample of adolescent mothers at three points in time; 2) examine changes in coping strategies and social support from the last trimester of pregnancy to six months postpartum; 3) determine whether changes in social support from the last trimester of pregnancy through the first month postpartum were related to changes in coping strategies from one month postpartum through six months postpartum; 4) measure differences between the group of mothers who had contact with the fathers of their babies and the group of mothers who did not have contact with the fathers of their babies in relation to satisfaction with social support; 5) examine the relationship between maternal age and the types of coping strategies most commonly used; and 6) examine the relationship between maternal age and frequency of received supportive activities.

These data are part of Dr. Panzarine's (1986b) larger, as yet unpublished, study of adolescent coping strategies and maternal adaptation. A data rights agreement exists between this author and Dr. Panzarine which permits this author the use

of Dr. Panzarine's data in the manner set forth by the data rights agreement (see Appendix A).

Subjects

A convenience sample of 144 primiparous adolescents who were in their last trimester of pregnancy were contacted consecutively from the University of Maryland's Adolescent Prenatal Clinic, located at the Western Center for Maternal and Infant Care, in Baltimore, Maryland, and invited to participate in the study. The Adolescent Prenatal Program has been in existence since 1981. The prenatal portion of the clinic enrolls teenagers who conceive prior to age 16 1/2, and predominantly serves those who live on the west side of Baltimore. Adolescents who are judged to be medically high-risk at the initial screening are not eligible for participation in the program. The overall goal of this program is to provide comprehensive, interdisciplinary prenatal care in order to improve pregnancy outcome. The population served is primarily black and from low-income families, with at least 50% from households headed by an AFDC recipient.

Nine of the 144 adolescents who were initially contacted refused to participate in the study. Of the 135 adolescents who agreed to participate, 2 subjects later withdrew their consent, and researchers were unable to contact 8 subjects

during the course of the study. In order to ensure a relatively healthy mother-infant dyad, subjects were dropped from the study if, at birth, the infant was born with health problems requiring continued hospitalization, or if the infant's 5 minute Apgar was less than 8. Consequently, 10 subjects were ineligible to continue to participate in the study due to medical factors. An additional 35 subjects who had not completed the six month postpartum questionnaires by October 31, 1987, were excluded from these analyses due to academic time constraints.

The final sample utilized for this study consisted of 80 primiparous females ranging from 12 to 18 years of age, with a mean age of 15.45. Ninety-five percent of the subjects were black and 5% were white. School grades completed by the subjects ranged from grade 6 to 11, with a mean grade of 8.71.

The Four Factor Index of Social Status (Hollingshead, 1975) was used to calculate each subject's household socioeconomic status (SES). The status score of an individual or nuclear family is attained by combining the assigned values of these factors: 1) the head(s) of the household's occupational status, 2) the head(s) of the household's educational status, and 3) the head(s) of the household's marital status. The total score is then categorized into five levels of social status. The lowest possible status category attained with this index is 8-19 and the highest possible

status category attained with this index is 55-66. Of the 71 subjects who were able to provide the necessary information pertaining to their parent(s), 57.5% lived in households that scored between 8 and 29, the lowest two SES categories.

Virtually all of the subjects reported that the pregnancy was wanted by the last trimester of pregnancy. The subjects' were all single, and all remained single throughout the study. The percentage of subjects who had contact with the fathers of their babies increased from 85% during the last trimester of the pregnancy to 91.2% by six months postpartum. Ninety-one percent of the subjects attended school during the last trimester of pregnancy, and 79% had returned to school by six months postpartum. Although only 2.5% of the subjects worked part time during the last trimester of pregnancy, by six months postpartum 17.5% of the subjects worked part time. A summary of the prenatal, one month postpartum, and six month postpartum demographic characteristics are presented in Table 1.

Instrumentation

Coping with Motherhood Instrument

Panzarine's unpublished Coping with Motherhood Instrument (Appendix B), was developed through the use of several sources. Individual items were constructed from data obtained

Table 1

Demographic Data

	Prenatal		1 Month		6 months	
	%	(n)	%	(n)	%	(n)
Race						
Black	95.0	(76)				
White	5.0	(4)				
Age						
12	1.2	(1)				
13	2.5	(2)				
14	11.2	(9)				
15	31.3	(25)				
16	43.8	(35)				
17	8.7	(7)				
18	1.2	(1)				
SES Code						
8-19	32.5	(26)				
20-29	25.0	(20)				
30-39	20.0	(16)				
40-54	7.5	(6)				
55-66	3.7	(3)				
Missing Data	11.2	(9)				
Pregnancy Wanted						
No	2.5	(2)				
Yes	97.5	(78)				
Grade Completed						
6	5.0	(4)				
7	13.7	(11)				
8	21.2	(17)				
9	33.7	(27)				
10	17.5	(14)				
11	8.7	(7)				

	Prenatal		1 Month		6 months	
	%	(n)	%	(n)	%	(n)
Marital Status						
Single	100.0	(80)	100.0	(80)	100.0	(80)
Contact with FOB						
Yes	85.0	(68)	86.2	(69)	91.2	(73)
No	15.0	(12)	13.7	(11)	8.7	(7)
School Status						
Attending School	91.2	(73)	25.0	(20)	78.7	(63)
Not Attending School	8.7	(7)	74.9	(60)	21.2	(17)
Employment						
Part Time	2.5	(2)	1.2	(1)	17.5	(14)
Full Time	1.2	(1)	0.0	(0)	1.2	(1)
Unemployed	96.2	(77)	98.7	(79)	81.3	(65)

Note. Percentages are rounded off to the nearest one-tenth of one percent.

from Panzarine's previous study (1986a) with adolescent mothers, and a review of Lazarus and Folkmans' Revised Ways of Coping Checklist (1984), McCubbin and Pattersons' Adolescent Coping Orientation for Problem Experiences (1981), and the adult and adolescent parenting literature.

The instrument consists of 64 four-point Likert scale items: (1) does not apply/not at all, (2) a little bit, (3) a lot, and (4) all of the time. Respondents are asked to circle the response which best shows what they have done or thought in the past month when dealing with becoming a mother or being a mother.

The Coping with Motherhood tool assesses the frequency that coping strategies are used from six categories: 1) reappraising the meaning of the situation; 2) dealing with the problem itself; 3) seeking social support; 4) wishful thinking; 5) emotionally detaching and/or avoiding confrontation; and 6) relieving tension through diversion, substance abuse and/or the expression of anger. Scores for each subscale are obtained by summing the responses circled. A high score indicates that a subscale of coping strategies is used a lot or almost all of the time and a low score indicates that a subscale of coping strategies is rarely used.

Content validity was established by submitting the subscale definitions and their respective items to two doctorally prepared nurses with expertise in the field of

coping. They were asked to assess the relevancy of the items to the content area which they addressed using a four-point rating scale. The number of items rated either "quite" or "very" relevant (3 or 4) by both raters were divided by the total number of items to provide an index of content validity. If any of the subscales received a rating below .80, items rated low (1 or 2) by both readers were deleted until a rating of .80 or better was achieved. Eight of the original items were discarded by this method (Panzarine & Kleinberg, 1986).

An educational consultant was given the items to be retained for determination of readability and appropriateness for the proposed sample. The questionnaire was determined to have a third grade reading difficulty level using the Fry readability formula.

Corrected item-total correlations for each of the six coping subscales were computed on data from a sample of 100 mothers from the Adolescent Parent Program at the same setting (Panzarine & Kleinberg, 1986). The subjects were similar to the present sample with respect to age, race, socioeconomic status, and marital status. Two of the items were deleted from the seeking social support subscale because of low item to total correlations. Alpha coefficients for the subscales were at acceptable levels, ranging from .69 to .82.

Internal consistency reliability was determined for each of the six coping subscales using data from the 80 subjects in

this study. Alpha coefficients were at acceptable levels ranging from .63 to .83. Subjects who did not complete all the items in a subscale were not included in the computations for that subscale. The number of items in each subscale, and their respective alpha coefficients, are displayed in Table 2.

Inventory of Socially Supportive Behaviors

Panzarine's adapted version of Barrera's Inventory of Socially Supportive Behaviors (Appendix B) consists of two subscales; one to assess the quantity of socially supportive behaviors received by adolescent mothers, and the other to assess the adolescent mothers' satisfaction with the frequency of these behaviors. Each subscale contains 32 items.

To measure the quantity of socially supportive activities that subjects received, subjects were asked to rate how often others have provided listed activities for them during the past month on a five-point Likert scale ranging from (1) not at all to (5) about every day. Listed items included material aid, physical assistance, intimate interaction, guidance, feedback, and social participation. Total scores for the subscale were obtained by summing item scores. A high score indicates that the subject receives most of the listed socially supportive activities at least several times a week, and a low score indicates that the subject seldom receives the listed

Table 2

Internal Consistency Reliability Coefficients for the Six Subscales of the Coping with Motherhood Instrument

Subscale	# Cases	# Items/ Subscale	Alpha Coefficient
Reappraising the Meaning of the Situation	77	12	.75
Dealing with the Problem Itself	79	12	.83
Seeking Social Support	74	15	.71
Wishful Thinking	77	6	.63
Emotionally Detaching	78	8	.78
Relieving Tension	75	11	.75

supportive activities. The tool was piloted on the subjects described on page 58, and the internal consistency reliability for the total scale was .92.

In order to measure the adolescents' satisfaction with these supportive behaviors, following each item subjects were asked whether or not they would have liked: 1) more of this help, 2) less of this help, or 3) it was about right. Dissatisfaction with support, responses (1) or (2), was scored as "1"; and satisfaction with support, response (3), was scored as "2". Total scores were obtained by summing item scores. A high score indicates that the subject is generally satisfied with the frequency that listed socially supportive activities are provided; and a low score indicates that the subject is generally dissatisfied with the frequency that listed socially supportive activities are provided. The internal consistency reliability for this scale was .94. The two support scales were correlated positively with one another with a Pearson correlation coefficient of .48 (Panzarine, 1986b).

The internal consistency reliability was computed for both of the social support subscales using data from subjects in this study. Subjects who did not complete all the items in a subscale were not included in the computations for that subscale. Alpha coefficients were at acceptable levels, with a score of .95 for the frequency of social support subscale, and a score of .95 for the satisfaction with social support

subscale.

Protection of Human Rights

Subjects were individually notified of their rights by the investigator or research assistants at the time they were invited to participate in the study. They were instructed that they could refuse to participate in the study or, if they agreed to participate, that they could withdraw their consent and discontinue participation at any time during the study. The subjects were given an explanation of the procedures that would be followed and their purposes, a description of the methods used to protect confidentiality, and an offer to answer any inquiries concerning the procedures. If they agreed to participate in the study, a consent form was signed by the subject, the investigator or a research assistant, and a witness (Appendix C). All questionnaires were identified by numbers, not names, in order to protect confidentiality, and all identifiers were removed from the folders in which data were kept after the subjects completed participation in the study.

Procedure

All subjects were approached initially while they were in

the prenatal clinic waiting room prior to a regularly scheduled appointment, and the purpose of the study was explained to them. Each adolescent who was asked to participate in the study was assigned an identification number in the order that they were contacted. Subjects who were willing to participate in the study were given a consent form to sign. The investigator or research assistants read the questionnaires' instructions to each subject to ensure understanding. The research tools included a demographics questionnaire, the Coping with Motherhood questionnaire, and the adapted Inventory of Socially Supportive Behaviors. If the investigator perceived that a subject was having difficulty understanding the questions, the questions were read to her.

Subsequent testing was performed by the investigator or the same research assistants during home visits at one and six months postpartum. Home visits were performed when the adolescent was alone with the infant whenever possible. The research assistants called each subject after the delivery to set up the initial one month postpartum appointment. The subjects were contacted by phone again between the one and six months postpartum visits to remind them that they were still participating in the study and to obtain a change of address if necessary. The subjects were called again at six months postpartum and a second home visit was scheduled.

Method of Data Analysis

Data were analyzed as follows:

1. Summary statistics were obtained for responses for each subscale of the Coping with Motherhood Instrument to describe the extent of coping strategies used from each category at three points in time. Summary statistics were also obtained for responses to the adapted Inventory of Socially Supportive Behaviors to describe the quantity of socially supportive behaviors received by adolescent mothers, and their reported satisfaction with the frequency of these behaviors, at three points in time.

2. To test the first and second hypotheses, that changes would occur over time in coping strategies used by adolescent mothers and their perceived social support, within group changes in coping strategies and perceived social support were measured using repeated measures one-way analysis of variance across three points in time: the third trimester of pregnancy, one month postpartum, and six months postpartum. If a significant difference was found in a coping subscale or social support subscale across all three points in time, repeated measures one-way analysis of variance was performed across two consecutive points in time; the last trimester of pregnancy to one month postpartum, and one month postpartum to six months

postpartum; to identify where the change occurred. Each computation of analysis of variance included only those subjects who had completed all of the items in all of the subscales.

3. The third hypothesis, changes in social support from the last trimester of pregnancy to the first month postpartum are associated with changes in coping strategies from the first month postpartum to the sixth month postpartum, was tested by using Chi square analysis. The relationships between two independent variables and six dependent variables were examined. The two independent variables were: 1) changes that occurred in the frequency of received supportive behaviors from the last trimester of pregnancy to one month postpartum, and 2) changes that occurred in satisfaction with social support from the last trimester of pregnancy to one month postpartum. The six dependent variables were changes that occurred in the frequency that strategies were used from one month postpartum to six months postpartum in each of the Coping with Motherhood subscales.

Change scores for the independent variables were created by subtracting each subject's prenatal scores from their one month postpartum scores on the two subscales of the Inventory of Socially Supportive Behaviors. A negative change score indicated that there was a decrease in satisfaction with

support or a decrease in the quantity of received supportive behaviors from the last trimester of pregnancy to one month postpartum; and a positive score indicated an increase in satisfaction with support or an increase in the quantity of received supportive behaviors from the last trimester of pregnancy to one month postpartum.

Change scores for the dependent variables were created by subtracting each subject's one month postpartum scores from their six month postpartum scores on the six subscales of the Coping with Motherhood instrument. A negative change score indicated a decrease in the use of coping strategies from a particular subscale from one month postpartum to six months postpartum, and a positive score indicated an increase in the use of coping strategies from a particular subscale from one month postpartum to six months postpartum.

Each subject's change scores for all of the variables were compared to the entire sample's standard deviation of change for the same variables across the same time intervals. One half of a unit of standard deviation was used as the criterion for determining whether or not there was a measurable change in the value of a variable. Values were categorized as follows: If the individual's score was greater than or equal to one half of the group's standard deviation of change in a negative direction (decrease), it was coded as a "1". If the individual's score was less than one half of the group's

standard deviation of change in either direction (no change), it was scored as a "2". If the individual's score was greater than or equal to one half of the group's standard deviation of change in a positive direction (increase), it was coded as a "3". Consequently, both the independent variables and the dependent variables had three categories: 1) a change in a negative direction, 2) no significant change, and 3) a change in a positive direction.

Chi square analysis was performed to test whether a relationship existed between the categories of the independent variable and the categories of the dependent variable. Individuals who did not complete at least 80% of the items in a subscale were not included in the computation of that subscale.

4. T-tests were performed on prenatal and one month postpartum data to test the fourth hypothesis: There is a difference between mothers who have contact with the fathers of their babies and those who do not have contact with the fathers of their babies in relation to satisfaction with social support. The number of subjects who did not have contact with the fathers of their babies at six months postpartum (n = 7) was not large enough to test for group differences.

5. Pearson's product-moment correlation coefficients were

obtained to test the fifth and sixth hypotheses which state, respectively, that a relationship exists between maternal age and the types of coping strategies that are most commonly used, and that a relationship exists between maternal age and the quantity of received socially supportive behaviors. Subjects who did not complete all of the items in a subscale were not included in the computations for that subscale.

CHAPTER IV: PRESENTATION AND ANALYSIS OF DATA

Summary statistics are provided to characterize subjects on coping strategies and perceived social support at three points in time: the last trimester of pregnancy; one month postpartum; and six months postpartum. Then, findings of the study are presented according to the hypotheses to which they pertain.

Prenatal Summary Statistics for the Coping with Motherhood Instrument

During the last trimester of pregnancy, the coping subscale used most often by adolescent mothers was "reappraising the meaning of the situation". Mean scores adjusted for the total number of items in each subscale for the last trimester of pregnancy are presented in Table 3.

On the Coping with Motherhood instrument, a scale point of 1 indicated that a particular strategy was never used, a scale point of 2 indicated that a strategy was used a little bit, a scale point of 3 indicated that a particular strategy was used a lot, and a scale point of 4 indicated that a particular strategy was used almost all of the time. The most common strategy used by adolescent mothers from the "reappraising the meaning of the situation" subscale, with a mean score of 3.39,

Table 3

The Coping with Motherhood Instrument Subscales for the Last Trimester of Pregnancy; Ranked by Adjusted Means[a]

Subscale	Total Mean	Adjusted Mean
Reappraisal	31.62	39.53
Dealing with the Problem	39.62	36.57
Wishful Thinking	12.56	31.39
Seeking Social Support	30.79	30.79
Emotionally Detaching	15.32	28.72
Relieving Tension	18.79	25.55

[a] Means are adjusted for the total number of items in each subscale.

was thinking of how much they loved their babies. Other strategies used a lot included: Thinking about the good things of being a mother; thinking about how much they wanted the baby; and thinking about how much they had grown as a person. Mean scores for these strategies were 3.37, 3.14, and 2.80, respectively. None of the reappraisal strategies were not used at all, or had mean scores less than 2.01. Strategies used infrequently, with mean scores of 2.01 and 2.09, were, respectively: Reminding themselves that the hard parts of being a mother would soon be over; and telling themselves that they were not really missing anything.

"Dealing with the problem itself" was the second most frequently used subscale during the last trimester of pregnancy. The strategies used a lot from this subscale, with mean scores of 2.95, 2.89, and 2.75, were, respectively: Going over in their minds what they would do with the baby; reading about being a mother or about what to do with a baby; and watching others do the things they would have to do. The only strategy from this subscale that was seldom used, with a mean score of 1.91, was trying out different things to deal with a situation.

"Wishful thinking" was the third most often used subscale during the last trimester of pregnancy. The coping strategies that were used a lot from this subscale, with mean scores of 2.82 and 2.76, were, respectively: Daydreaming about how

things might turn out; and looking forward to when the baby would be a bit older. A strategy that was almost never used, with a mean score of 1.11, was wishing that the baby would go away for awhile. Strategies that were seldom used, with mean scores of 1.87, 1.99, and 2.02, were, respectively: Wishing that they could change the way they felt; wishing things were different; and hoping that a miracle would happen.

"Seeking social support" was the fourth most often used subscale during the last trimester of pregnancy. The only strategy from this subscale that was used a lot, with a mean score of 2.87, was thinking of people who could help with the baby. The strategy used least from this subscale, with a mean score of 1.08, was talking to a minister, priest, or rabbi. Other strategies that were seldom used from this subscale, with mean scores of 1.55, 1.78, 2.06, 2.07, 2.19, and 2.23, were, respectively: Going to a group for new mothers; talking with their doctors or nurses so that the health care providers could tell them what they were doing was right; talking with their boyfriends so that their boyfriends could tell them that what they were doing was right; talking with their families so that family members could tell them that what they were doing was right; talking with their families about how they felt; and talking with their friends about how they felt.

"Emotionally detaching" and "relieving tension" were, respectively, the least used subscales of coping strategies

during the last trimester of pregnancy. None of the listed strategies within the "emotionally detaching" subscale were used a lot, or had mean scores greater than 2.31. The least used strategy from this subscale, with a mean score of 1.85, was just accepting the situation because there was nothing that could be done. Other strategies that were used infrequently, with mean scores of 1.95, 2.06, 2.08, and 2.22, were, respectively: Trying to be alone; trying to ignore things for awhile; trying not to think about things for awhile; and trying to go on as if nothing had changed.

The only strategy in the "relieving tension" subscale that was used a lot, with a mean score of 2.80, was doing something to take their minds off things for awhile like watching television, talking on the phone, and listening to music. Strategies used almost not at all, with mean scores of 1.01, 1.04, 1.16, 1.26, and 1.29, were, respectively: Using drugs; drinking wine, beer, or liquor; smoking cigarettes more; getting angry and hitting someone; and blaming others for things that went wrong. Other strategies that were seldom used, with mean scores of 1.87, 1.97, 2.01, 2.02, and 2.20, were, respectively: Letting off steam by crying; thinking about other things to take their minds off their situations for awhile; letting off steam by complaining about things; and getting angry and yelling at someone.

Prenatal Summary Statistics for Frequency of Socially Supportive Behaviors and Satisfaction with Social Support

The mean score for the total frequency of socially supportive behaviors subscale indicated that, during the last trimester of pregnancy, listed activities were generally provided between once a week to several times a week. On this scale, a score point of 1 indicated that a listed behavior rarely or never occurred, a score point of 2 indicated that a listed activity occurred once or twice; a score point of 3 indicated that a listed activity occurred about once a week; a score point of 4 indicated that a listed behavior occurred several times a week; and a score point of 5 indicated that a listed activity occurred about every day.

None of the listed behaviors had mean scores greater than 4.36, or occurred about every day. Listed behaviors that were received by adolescent mothers several times a week, with mean scores of 4.36, 4.09, 3.94, 3.91, 3.83, 3.81, 3.64, 3.63, 3.63, 3.58, and 3.58, were, respectively: Letting them know that someone would always be around if they needed help; expressing interest and concern in them; providing them with a place to stay; joking and kidding to try to cheer them up; telling them that someone feels very close to them; giving them money; providing transportation; helping them set personal goals; telling them what to expect in a situation that was about to

happen; helping them do things that needed to get done; and showing them how to do things.

None of the listed behaviors occurred not at all, or had mean scores less than 2.17. Activities that occurred infrequently, with mean scores of 2.17, 2.27, and 2.27, were, respectively: Telling them who they should see for help; watching after their things when they were away; and helping them understand why they did not do something well. The mean score for the total satisfaction with social support subscale indicated that, during the last trimester of pregnancy, subjects were satisfied with the frequency of approximately 50% of the listed activities and dissatisfied with the frequency of approximately 50% of the listed activities.

One Month Postpartum Summary Statistics for the Coping with Motherhood Instrument

At one month postpartum, the subscale of coping strategies used most often by adolescent mothers was "reappraising the meaning of the situation". Mean scores adjusted for the total number of items in each subscale at one month postpartum are presented in Table 4. Strategies used a lot or almost all of the time from this subscale, with mean scores of 3.78, 3.22, 3.11, 3.11, and 2.99, were, respectively: Thinking how much they loved the baby; thinking about the good things of being a

Table 4

The Coping with Motherhood Instrument Subscales at One Month Postpartum: Ranked by Adjusted Means[a]

Subscale	Total Mean	Adjusted Mean
Reappraisal	33.47	41.83
Dealing with the Problem	31.11	38.88
Seeking Social Support	32.92	32.92
Wishful Thinking	12.66	31.65
Emotionally Detaching	15.62	29.29
Relieving Tension	17.99	24.46

[a] Means are adjusted for the total number of items in each subscale.

mother; thinking about how much they wanted the baby; thinking about how much they had grown as a person; and thinking about how much easier the baby would get as he/she got older. The only strategy that was seldom used, with a mean score of 2.20, was telling themselves that they were not really missing anything.

"Dealing with the problem itself" was the second most frequently used subscale at one month postpartum. The strategies used a lot from this subscale, with mean scores of 2.92, 2.81, 2.80, and 2.75, were, respectively: Going over in their minds what they would do with the baby; when they found something that worked with the baby, they tried to use it the next time; trying to be flexible about what they had to do and when; and thinking back to what they did when caring for other babies. The only strategy from this subscale that was used infrequently, with a mean score of 2.05, was trying out different things to deal with a situation.

"Seeking social support" was the third most often used subscale at one month postpartum. Strategies from this subscale that were used a lot, with mean scores of 3.02, 2.84, 2.82, and 2.81, were, respectively: Getting someone to help take care of the baby; thinking of people who could help with the baby; talking with their boyfriends about how they felt; and trying to keep up their friendships. Strategies that were almost not used at all, with mean scores of 1.16 and 1.35 were,

respectively: Talking to a minister, priest, or rabbi; and waiting until someone was around to help before they did things with the baby. Strategies that were seldom used from this subscale, with mean scores of 1.67, 1.77, 2.06, 2.11, 2.14, 2.17, and 2.18, were, respectively: Asking others to babysit so they could get away for awhile; going to a group for new mothers; talking with their families about how they felt; talking with their doctors or nurses so that the health care providers could tell them what they were doing was right; talking with friends about how they felt; trying to make new friends; and talking with their families so that their family members could tell them that what they were doing was right.

"Wishful thinking" was the fourth most often used subscale at one month postpartum. The coping strategy that was used a lot from this subscale, with a mean score of 3.31, was looking forward to when the baby was a bit older. Strategies used least often, with mean scores of 1.19, 1.67, 1.76, and 2.02, were, respectively: Wishing that the baby would go away for awhile; wishing that they could change the way they felt; wishing things were different; and hoping that a miracle would happen.

"Emotionally detaching" and "relieving tension" were, respectively, the least used subscales of coping strategies at one month postpartum. None of the listed strategies within the "emotionally detaching" subscale were used a lot, or had mean

scores greater than 2.27. The coping strategy from this subscale that was almost never used, with a mean score of 1.19, was trying not to think about things for awhile. Strategies used infrequently, with mean scores of 1.57, 1.79, 1.80, 1.92, 2.07, 2.21, and 2.27, were, respectively: Trying to stay away from situations with the baby that made them feel bad; trying to be alone; trying to ignore things for awhile; trying to not respond to the baby's crying right away; just accepting the situation because there was nothing that could be done; trying to go on as if nothing had changed; and trying to get away from things for awhile by going shopping, visiting, etc..

None of the strategies in the "relieving tension" subscale were used a lot, or had mean scores greater than 2.61. Strategies almost never used, with mean scores of 1.04, 1.10, 1.16, 1.29, and 1.39 were, respectively: Using drugs; drinking beer, wine, or liquor; getting angry and hitting someone; smoking cigarettes more; and blaming others for things that went wrong. Other strategies that were seldom used, with mean scores of 1.67, 1.72, 1.74, 2.05, and 2.24, were, respectively: Getting angry and yelling at someone; letting off steam by crying; letting off steam by complaining about things; thinking about other things to take their minds off their situations for awhile; and trying to keep busy to keep their minds off their problems.

One Month Postpartum Summary Statistics for Frequency of Socially Supportive Behaviors and Satisfaction with Social Support

The mean score for the total frequency of socially supportive behaviors subscale indicated that, at one month postpartum, listed activities were generally provided between once a week to several times a week. None of the listed behaviors occurred about every day, or had mean scores greater than 4.14. Listed behaviors that were received by adolescent mothers several times a week, with mean scores of 4.14, 3.85, 3.75, 3.70, 3.70, 3.67, 3.65, 3.55, and 3.50, were, respectively: Letting them know that someone would always be around if they needed help; providing them with a place to stay; expressing interest and concern in them; telling them that someone feels very close to them; joking and kidding to try to cheer them up; helping them do things that needed to get done; providing money; providing transportation; and giving them information on how to do things.

None of the listed activities occurred not at all, or had mean scores less than 2.33. The only listed behavior that was seldom provided, with a mean score of 2.33, was telling them who they should see for help. The mean score for the total satisfaction with social support subscale indicated that, at one month postpartum, subjects were satisfied with the

frequency of approximately 50% of the listed activities and dissatisfied with the frequency of approximately 50% of the listed activities.

Six Month Postpartum Summary Statistics for the Coping with Motherhood Instrument

At six months postpartum the subscale of coping strategies used most often by adolescent mothers was "reappraising the meaning of the situation". Mean scores adjusted for the total number of items in each subscale at six months postpartum are presented in Table 5. Strategies used a lot or almost all the time from this subscale, with mean scores of 3.85, 3.30, 3.20, 3.14, 3.02, and 2.95, were, respectively: Thinking how much they loved the baby; thinking about the good things of being a mother; thinking about how much they wanted the baby; thinking about how much they had grown as a person; thinking about how much easier the baby would get as he/she got older; and thinking of others who had it worse then themselves. None of the reappraisal strategies were seldom used, or had mean scores less than 2.30.

"Dealing with the problem itself" was the second most frequently used subscale at six months postpartum. The strategies used most often from this subscale, with mean scores of 2.87 and 2.86 were, respectively: Going over in their minds

Table 5

The Coping with Motherhood Instrument Subscales at Six Months Postpartum: Ranked by Adjusted Means[a]

Subscale	Total Mean	Adjusted Mean
Reappraisal	33.96	42.45
Dealing with the Problem	30.66	38.32
Wishful Thinking	13.12	32.79
Seeking Social Support	31.23	31.23
Emotionally Detaching	16.50	30.94
Relieving Tension	18.49	25.15

[a] Means are adjusted for the number of items in each subscale.

what they would do with the baby; and when they found something that worked with the baby, they tried to use it the next time. The only strategy that was seldom used, with a mean score of 2.10, was trying out different things to deal with a situation.

"Wishful thinking" was the third most often used subscale at six month postpartum. The coping strategy that was used a lot from this subscale, with a mean score of 3.32, was looking forward to when the baby would be a bit older. Strategies used least often, with mean scores of 1.32, 1.82, 1.86, and 2.06, were, respectively: Wishing that the baby would go away for awhile; wishing that they could change the way they felt; wishing things were different; and hoping that a miracle would happen.

"Seeking social support" was the fourth most often used subscale at six months postpartum. The only strategy from this subscale that was used a lot, with a mean score of 2.91, was trying to keep up their friendships. Strategies that were almost never used, with mean scores of 1.10 and 1.29 were, respectively: Talking to a minister, priest, or rabbi; and waiting around for help before doing things with the baby. Other strategies that were seldom used from this subscale, with mean scores of 1.50, 1.73, 1.83, 2.09, 2.11, and 2.21, were, respectively: Going to a group for new mothers; talking with their doctors or nurses so that the health care providers could

tell them what they were doing was right; asking others to babysit so that they could get away for awhile; talking with their families so that family members could tell them that what they were doing was right; talking with their friends about how they felt; and talking with their boyfriends so that the boyfriends could tell them that what they were doing was right.

"Emotionally detaching" and "relieving tension" were, respectively, the least used subscales of coping strategies at six months postpartum. None of the listed strategies within the "emotionally detaching" subscale were used a lot, or had mean scores greater than 2.46. Strategies that were seldom used, with mean scores of 1.76, 1.77, 1.90, 2.02, 2.14, and 2.18, were, respectively: Trying to stay away from situations with the baby that made them feel bad; trying not to respond to the baby's crying right away; trying to be alone; trying not to think about things for awhile; trying to ignore things for awhile; and just accepting the situation because there was nothing that could be done.

None of the strategies in the "relieving tension" subscale were used a lot, or had mean scores greater than 2.60. Strategies that were almost never used, with mean scores of 1.04, 1.05, 1.14, 1.30, and 1.37 were, respectively: Using drugs; getting angry and hitting someone; drinking beer, wine , or liquor; blaming others for things that went wrong; and smoking cigarettes more. Strategies that were seldom used,

with mean scores of 1.77, 1.84, 1.95, 2.11, and 2.30, were, respectively: Letting off steam by complaining about things; letting off steam by crying; getting angry and yelling at someone; thinking about other things to take their minds off their situations for awhile; and trying to keep busy to keep their minds off their problems.

Six Month Postpartum Summary Statistics for Frequency of Socially Supportive Behaviors and Satisfaction with Social Support

The mean score for the total frequency of socially supportive behaviors subscale indicated that, at six months postpartum, listed activities were generally provided between once a week to several times a week. None of the listed behaviors had a mean score greater than 3.96, or occurred about every day. Listed behaviors that were received by adolescent mothers several times a week, with mean scores of 3.96, 3.76, 3.71, 3.55, and 3.54, were, respectively: Letting them know that someone would always be around if they needed help; providing them with a place to stay; telling them that someone feels very close to them; giving them money; and expressing interest and concern in them.

None of the listed behaviors occurred not at all, or had mean scores less than 2.23. The only activity that seldom

occurred, with a mean score of 2.23, was telling them who they should see for help. The mean score for the total satisfaction with social support subscale indicated that, at six months postpartum, subjects were satisfied with the frequency of approximately 50% of the listed activities and dissatisfied with the frequency of approximately 50% of the listed activities.

Results According to Hypotheses

Hypothesis #1: Change in Coping Strategies

This hypothesis stated that, due to the dynamic nature of coping, coping strategies used by individuals would change from the last trimester of pregnancy through six months postpartum. Repeated measures one-way analysis of variance across all three points in time demonstrated significant changes between three coping subscales: seeking social support ($p<.05$); dealing with the problem itself ($p<.05$); and reappraising the meaning of the situation ($p<.02$) (Table 6).

In order to identify when the changes occurred, repeated measures one-way analysis of variance was performed examining these three coping subscales across two consecutive time periods: from the last trimester of pregnancy to one month postpartum; and from one month postpartum to six months

Table 6

Repeated Measures One Way Analysis of Variance for Changes in Coping Strategies from the Last Trimester of Pregnancy through Six Months Postpartum

Subscale	Source of Variance	Sums of Squares	df	Mean Square	F
Reappraisal					
	Within Cells	1737.08	100	17.37	4.46*
	Time	154.92	2	77.46	
Dealing with the Problem					
	Within Cells	1831.84	100	18.32	3.77*
	Time	154.92	2	77.46	
Seeking Social Support					
	Within Cells	2066.27	100	20.66	4.03*
	Time	166.39	2	83.20	
Wishful Thinking					
	Within Cells	370.35	100	3.70	2.29
	Time	16.98	2	8.49	
Emotionally Detaching					
	Within Cells	1078.65	100	10.79	1.30
	Time	28.01	2	14.01	
Relieving Tension					
	Within Cells	1038.18	100	10.38	.31
	Time	6.48	2	3.24	

* $p < .05$

postpartum. The changes that occurred in the three subscales were significant from the last trimester of pregnancy to one month postpartum (Table 7), but they were not significant from one month postpartum to six months postpartum.

The mean score for the "seeking social support" subscale during the last trimester of pregnancy was 30.79, and at one month postpartum it was 32.92, indicating that the use of this subscale of coping strategies increased from the last trimester of pregnancy to one month postpartum ($p<.01$). The mean score for the "dealing with the problem itself" subscale was 29.26 during the last trimester of pregnancy, and 31.11 at one month postpartum, indicating that the use of this subscale of coping strategies increased from the last trimester of pregnancy to one month postpartum ($p<.01$). The mean score for the "reappraising the meaning of the situation" subscale was 31.62 during the last trimester of pregnancy, and 33.47 at one month postpartum, indicating that the use of this subscale of coping strategies increased from the last trimester of pregnancy to one month postpartum ($p<.05$).

Hypothesis #2: Changes in Social Support

This hypothesis stated that the frequency of socially supportive activities and satisfaction with social support would change from the last trimester of pregnancy through six

Table 7

Repeated Measures One Way Analysis of Variance for Changes in Coping Strategies from the Last Trimester of Pregnancy to One Month Postpartum

Subscale	Source of Variance	Sums of Squares	df	Mean Square	F
Reappraisal					
	Within Cells	1074.04	57	18.84	4.85*
	Time	91.46	1	91.46	
Dealing with the Problem					
	Within Cells	910.00	57	15.96	7.27**
	Time	116.00	1	116.00	
Seeking Social Support					
	Within Cells	950.83	57	16.68	9.84**
	Time	164.17	1	164.17	

* $p < .05$; ** $p < .01$

months postpartum. Repeated measures one-way analysis of variance demonstrated no significant changes in the frequency of received socially supportive behaviors or satisfaction with social support from the last trimester of pregnancy through six months postpartum.

Hypothesis #3: Changes in Social Support Associated with Changes in Coping Strategies

This hypothesis stated that a change in the frequency of received socially supportive activities or a change in satisfaction with social support from the last trimester of pregnancy to one month postpartum is associated with a change in coping strategies from one month postpartum to six months postpartum. Changes in satisfaction with social support from the last trimester of pregnancy to one month postpartum were not significantly associated with changes in coping strategies from one month postpartum to six months postpartum. Changes in the frequency of received socially supportive behaviors from the last trimester of pregnancy to one month postpartum were significantly associated with changes in two coping subscales from one month postpartum to six months postpartum: relieving tension ($p<.01$) and wishful thinking ($p<.05$) (Table 8).

For those mothers who reported a decrease in the frequency of received supportive behaviors from the last

Table 8

Chi Square Analysis of the Relationship Between Changes in Frequency of Supportive Behaviors from the Last Trimester of Pregnancy to One Month Postpartum and Changes in Coping Strategies from One Month Postpartum to Six Months Postpartum

Change in Frequency of Socially Suportive Behaviors

Coping Subscales	Decreased Freq 1	No Change 2	Increased Freq 3	Chi Square
Reappraisal				2.29
1 Less Use	8 (32.0%)	9 (26.5%)	8 (40.0%)	
2 No Change	6 (24.0%)	13 (38.2%)	5 (25.0%)	
3 More Use	11 (44.0%)	12 (35.3%)	7 (35.0%)	
Dealing with Problem				2.33
1 Less Use	9 (36.0%)	9 (26.5%)	9 (45.0%)	
2 No Change	15 (60.0%)	24 (70.6%)	10 (50.0%)	
3 More Use	1 (4.0%)	1 (2.9%)	1 (5.0%)	
Seeking Social Support				3.23
1 Less Use	10 (40.0%)	9 (26.5%)	9 (45.0%)	
2 No Change	5 (20.0%)	13 (38.2%)	6 (30.0%)	
3 More Use	10 (40.0%)	12 (35.3%)	5 (25.0%)	
Wishful Thinking				10.21*
1 Less Use	1 (4.0%)	9 (26.5%)	3 (15.0%)	
2 No Change	15 (60.0%)	12 (35.3%)	14 (70.0%)	
3 More Use	9 (36.0%)	13 (38.2%)	3 (15.0%)	
Emotionally Detaching				5.40
1 Less Use	4 (16.0%)	7 (20.6%)	7 (35.0%)	
2 No Change	9 (36.0%)	17 (50.0%)	9 (45.0%)	
3 More Use	12 (48.0%)	10 (29.4%)	4 (20.0%)	
Relieving Tension				13.97**
1 Less Use	3 (12.0%)	14 (41.2%)	8 (40.0%)	
2 No Change	11 (44.0%)	14 (41.2%)	2 (10.0%)	
3 More Use	11 (44.0%)	6 (17.6%)	10 (50.0%)	

Note. Numbers in parentheses represent column percents.

* $p < .05$; ** $p < .01$

trimester of pregnancy to one month postpartum, 12% reported using less relieving tension coping strategies from one month postpartum to six months postpartum; while among mothers who reported an increase in the frequency of received supportive behaviors from the last trimester of pregnancy to one month postpartum, 40% reported using less relieving tension coping strategies from one month postpartum to six months postpartum. For those mothers who reported a decrease in the frequency of received supportive behaviors from the last trimester of pregnancy to one month postpartum, 36% reported using more wishful thinking coping strategies from one month postpartum to six months postpartum; while among mothers who reported an increase in the frequency of received supportive behaviors from the last trimester of pregnancy to one month postpartum, 15% reported using more wishful thinking coping strategies from one month postpartum to six months postpartum.

Hypothesis #4: Contact with the Father of the Baby and Satisfaction with Social Support

This hypothesis stated that there would be a difference between mothers who had contact with the fathers of their babies and mothers who did not have contact with the fathers of their babies in relation to satisfaction with social support. T-tests demonstrated no significant differences between these

two groups during the last trimester of pregnancy and at one month postpartum.

Hypothesis #5: Age and Coping Strategies

This hypothesis stated that maternal age would be related to the types of coping strategies most commonly used. Pearson's product-moment correlations did not demonstrate a significant relationship between maternal age and the types of coping strategies that were used most often.

Hypothesis #6: Age and Frequency of Received Supportive Behaviors

This hypothesis stated that there would be a relationship between maternal age and the frequency of received socially supportive behaviors. Pearson's product-moment correlations did not demonstrate a significant relationship between maternal age and the frequency of received socially supportive activities.

Summary

Based on descriptive analyses, subjects used coping strategies from the subscales "reappraising the meaning of the

situation" and "dealing with the problem itself" most often during the last trimester of pregnancy, at one month postpartum, and at six months postpartum. The coping subscale "wishful thinking" was used more often than "seeking social support" during the last trimester of pregnancy and at six months postpartum, but less often than "seeking social support" at one month postpartum. Mothers generally received listed socially supportive activities between once a week to several times a week at all three points in time, and were satisfied with the frequency of listed behaviors approximately 50% of the time.

Strategies from the coping subscales "reappraising the meaning of the situation", "dealing with the problem itself", and "seeking social support" were used significantly more often at one month postpartum than during the last trimester of pregnancy, but did not change significantly from one month postpartum to six months postpartum. A change in the frequency of received socially supportive behaviors from the last trimester of pregnancy to one month postpartum was associated with changes in two subscales of coping strategies from one month postpartum to six months postpartum--relieving tension and wishful thinking. Among mothers who reported a decrease in the frequency of received socially supportive behaviors from the last trimester of pregnancy to one month postpartum, 12% reported using less "relieving tension" coping strategies from

one month postpartum to six months postpartum; while among mothers who reported an increase in the frequency of received socially supportive behaviors from the last trimester of pregnancy to one month postpartum, 40% reported using less "relieving tension" coping strategies from one month postpartum to six months postpartum. Among mothers who reported a decrease in the frequency of received socially supportive behaviors from the last trimester of pregnancy to one month postpartum, 36% reported using more "wishful thinking" coping strategies from one month postpartum to six months postpartum; while among mothers who reported an increase in the frequency of received supportive behaviors from the last trimester of pregnancy to one month postpartum, 15% reported using more wishful thinking coping strategies from one month postpartum to six months postpartum.

CHAPTER V: CONCLUSIONS, IMPLICATIONS, RECOMMENDATIONS, AND SUMMARY

Conclusions

The primary purpose of this longitudinal study was to describe the types of coping strategies used by low income primiparous adolescent mothers, and their perceived social support, at three points in time. Due to the descriptive nature of these analyses, and the nonrandom sampling technique that was employed, the generalizability of these findings are limited.

The data demonstrated that the young women in this sample used both *emotion-focused* and *problem-focused* strategies to cope with the demands associated with impending and actual motherhood. Cognitive reappraisal was used most often at all three points in time, and included such strategies as making positive comparisons and deriving positive values from events. Dealing with the problem itself was also used very often, with anticipatory coping to avert problems and information-seeking being the most common strategies prenatally, and problem-solving as the most common strategy after the birth.

Seeking social support as a coping strategy, although used quite often, was used less extensively than was expected. However, Barrera (1981) found in his study of pregnant

adolescents that support need was positively associated with the measure of stressful life events and negatively associated with support satisfaction. Therefore, it is possible that since virtually all of the adolescents in this study wanted the pregnancy by the last trimester of gestation, it was not perceived as a negative life event. This, combined with the degree of support satisfaction that was experienced, might have negated to some extent the need to actively seek support.

Wishful thinking was also used quite often. Of interest, wishful thinking was used more often than seeking social support during the last trimester of pregnancy and at six months postpartum, but seeking social support was used more often than wishful thinking at one month postpartum. A logical explanation for this finding might be that, since the birth of an infant is accompanied by the need to master new tasks, the inexperienced mother would be more likely to seek tangible assistance immediately after the birth than at any other time. At six months postpartum, as the mothers became more competent in their maternal roles, they might not have perceived as great a need to seek assistance, or were reluctant to demonstrate a need for such assistance.

Interestingly, emotion-focused strategies that involved emotionally detaching and relieving tension through diversion, substance abuse, and anger were rarely used by adolescent mothers in this sample. This finding may be explained in part

by the social unacceptability of these types of strategies. Theoretically, the adolescents' families might not have tolerated these types of behaviors, or the adolescents might have been unwilling to admit to using them. A more likely explanation, based on other findings (Colletta, Hadler, & Gregg, 1981; Panzarine, 1986a), is that the adolescents received sufficient familial support to ease the transition to motherhood and facilitate other forms of coping. Conceivably, since this study only examined adolescent coping strategies through six months postpartum, and research indicates that the help received by adolescent mothers may decline between 8 and 12 months postpartum (Mercer, Hackley, & Bostrom, 1984), a longer view might reveal a different picture regarding the use of these types of emotion-focused coping strategies.

Also of interest, especially to the nursing profession, was the almost exclusive use of informal sources of social support, such as family members, peers, and boyfriends; as opposed to the use of formal sources of support, such as health care providers and members of the ministry. These findings are supported by other studies of adolescents and social support (Burke & Weir, 1978; Cauce, Felner, & Primavera, 1982) in which adolescents relied primarily on their mothers and fathers for support, and were less likely to use counselors, teachers, and clergy, although this varied to some extent based on the adolescent's age, gender, and ethnic background.

Socially supportive activities occurred, on the average, between weekly to several times a week at all three points in time. The socially supportive activities that occurred most often included emotional support and tangible assistance, although cognitive support was also provided quite often. The adolescents were satisfied with the frequency of about half of the listed supportive activities at all three points in time.

Hypothesis #1 stated that coping strategies would change from the last trimester of pregnancy through six months postpartum. Findings demonstrated that the use of coping strategies from three subscales increased significantly from the last trimester of pregnancy to one month postpartum: "reappraising the meaning of the situation", "dealing with the problem itself", and "seeking social support".

A significant increase in the use of both problem-focused and emotion-focused coping strategies during the first few weeks postpartum is a logical finding considering the extensive changes in tasks, roles, and relationships that accompany a birth. The onset of new tasks are generally concrete in nature; consequently, the adolescents had to mobilize strategies that would best facilitate the performance of these tasks such as seeking social support and dealing with the problems. The changes that occur in roles and relationships after a birth, being somewhat more intangible in nature, most likely forced the adolescent mothers to increase their use of

emotion-focused coping strategies such as cognitive reappraisal. Since the use of these coping strategies did not change significantly from one month postpartum to six months postpartum, it is possible that the changes in roles and tasks that occurred during that time were too insidious in nature to produce obvious changes in coping strategies.

Hypothesis #2 stated that changes would occur in the frequency of received supportive behaviors and satisfaction with social support from the last trimester of pregnancy through six months postpartum. Although significant changes did not occur in either of these dimensions of social support in this study, research indicates that a decline in social support is most obvious between eight and twelve months after the delivery (Mercer, Hackley, & Bostrom, 1984). The authors suggested that this change may have reflected the adolescent's assumption of her independence, a process that might have been interrupted by the birth. Therefore, this analysis may have been terminated too soon to fully assess changes in adolescent mothers' social support over time.

Hypothesis #3 stated that changes in the frequency of socially supportive behaviors and/or changes in satisfaction with social support from the last trimester of pregnancy to one month postpartum would be associated with changes in coping strategies from one month postpartum to six months postpartum. Change in the frequency of received supportive behaviors was

associated with changes in two coping subscales: wishful thinking and relieving tension. Among mothers who reported a decrease in the frequency of received socially supportive behaviors from the last trimester of pregnancy to one month postpartum, 12% reported using less "relieving tension" coping strategies from one month postpartum to six months postpartum; while among mothers who reported an increase in the frequency of received socially supportive behaviors from the last trimester of pregnancy to one month postpartum, 40% reported using less "relieving tension" coping strategies from one month postpartum to six months postpartum. Among mothers who reported a decrease in the frequency of received socially supportive behaviors from the last trimester of pregnancy to one month postpartum, 36% reported using more "wishful thinking" coping strategies from one month postpartum to six months postpartum; while among mothers who reported an increase in the frequency of received supportive behaviors from the last trimester of pregnancy to one month postpartum, 15% reported using more wishful thinking coping strategies from one month postpartum to six months postpartum.

It was expected, based on Barrera's work (1981), that a change in satisfaction with social support would be more likely to be associated with changes in coping strategies than a change in the frequency of received supportive behaviors, which was not the case. This finding might have been related to the

insensitivity of the adapted Inventory of Socially Supportive Behaviors to distinguish certain types of supportive activities from others. A change in satisfaction with certain supportive behaviors could have been offset by changes in satisfaction with other types of supportive behaviors, which may not have been reflected in the total satisfaction with support scores but could have affected the types of coping strategies that were used. In order to determine if satisfaction with specific supportive behaviors are more predictive than others in regard to changes in coping strategies, clusters of behaviors would need to be isolated for testing (Gottlieb, 1978).

Hypothesis #4 stated that there would be a difference between mothers who had contact with the fathers of their babies and mothers who did not have contact with the fathers of their babies in relation to satisfaction with social support. Significant differences were not found between these two groups which was probably due to the lack of variance in the sample scores. The sample distribution in this study was drastically skewed, with 85% of the mothers reporting that they had contact with the fathers of their babies during the last trimester of pregnancy, and 86% reporting that they had contact with the fathers of their babies at one month postpartum.

Another explanation for this finding might have been the methodology with which this information was obtained. The pertinent item on the demographic tool asked about the quantity

of contacts with the father of the baby, but it did not include a method to identify the mothers' perceived satisfaction with the contacts that generally took place. Some forms of social support may actually have a negative impact on satisfaction with support (Antonucci, 1985). Consequently, in order to more accurately measure the effects of contact with the fathers of the babies in relation to satisfaction with social support, the quality of the contacts would need to be assessed.

Hypotheses #5 and #6 stated that there would be, respectively, a relationship between maternal age and the types of coping strategies used, and a relationship between maternal age and the frequency of received supportive behaviors. The lack of significant findings for each of these relationships was most likely due to the lack of variance in the distribution of the subjects' ages, since more than 75% of the subjects were either 15 or 16 years old. Another issue is that developmental factors may be more predictive of differences in coping strategies and received social support than chronological age, and would need to be independently assessed.

Implications for Nursing

Nursing is a unique science in that it involves practices that were developed to meet the health needs of individuals as holistic beings as opposed to separate components of a biologic

system. It is this concern with the individual as a biopsychosocial being that serves to distinguish nursing from other health care disciplines, and it is this distinction that serves to validate the importance of the nursing role in the delivery of comprehensive health care to patients. The nurse who is involved in the care of pregnant and parenting adolescents typically has many opportunities to interact with these young patients, and may be in an ideal position to continually assess their overall well-being, and to plan, implement, coordinate, and evaluate the ongoing health care that they receive.

The literature suggests that adolescent mothers are exposed to a wide variety of demands, and, based on Lazarus's conceptual framework, the way that they appraise environmental demands and the strategies that they use to cope with these demands will play a significant role in how well they function in their maternal roles and other areas of work and living. Consequently, in order to diagnose and treat the potential effects of stress on the psychological and somatic health of adolescent mothers, the nurse must first be aware of the mediators in the relationship between the individual and her environment: how the adolescent appraises the situation or event, the personal and situational factors that influence the adolescent's appraisal, the resources available to the adolescent to cope with the environment, and the strategies

that she is using to cope with environmental demands. The nurse must then strive for congruence between the individual's personal and environmental resources, their psychosocial needs, and methods of intervention (Kendall & Braswell, 1986).

Evident from studies of adolescent mothers (Colletta & Gregg, 1984; Colletta, Hadler, & Gregg, 1984; Panzarine, 1986a), social support may be one of the most important mediators in the transaction between the adolescent mother and her environment. Findings from this study demonstrated that adolescent mothers were only satisfied with the frequency of about half of their received socially supportive behaviors. Consequently, prenatal assessment should include the identification of the primary sources of support, the adolescent's subjective appraisal of the support in terms of helpfulness, and the nature and frequency of the activities that are involved. Once these dimensions of support are identified, the nurse must strive to collaborate with the adolescent and her primary sources of support to identify both weaknesses and strengths in the helping relationships, develop strategies to solve interpersonal problems, and identify methods with which the adolescent can provide ongoing feedback to the providers of support.

The effectiveness of social support as a buffer to stress may be related, to some extent, on the individuals' interpersonal skills, or their competence in seeking or

receiving support from others (Antonucci, 1985). Nursing interventions that involve the teaching of socialization skills and interpersonal problem-solving may be indicated for some adolescent mothers. One model of interpersonal problem-solving that may be applied to nursing practice was developed by D'Zurilla and Goldfried in 1971. The first stage of this five-stage model would involve helping the adolescent mother to recognize that problems are a normal aspect of life, enforcing her belief that she is capable of solving problems, and having her identify methods that she has utilized in the past to cope with similar problems. The second stage would involve helping the adolescent to define current problems with which she must cope, and to formulate goals that must be achieved in order to solve those problems. The third stage would involve helping the adolescent to generate a variety of alternative solutions to each identified problem area. The fourth stage would involve helping the adolescent evaluate the costs and benefits, and short and long term consequences, of each possible alternative. Finally, once a decision has been made concerning the alternatives, the last stage would involve the evaluation of the success of the outcome as perceived by the adolescent.

However, depending on the novelty of the events with which the adolescent mother must cope, her repertoire of experiences may not be adequate to generate a variety of possible alternatives, or to recognize the short and long-term

consequences of these alternatives. Consequently, the clinician must identify the adolescent mother's knowledge deficits, and provide sufficient opportunities for the individual to obtain the information required to solve identified problems. Educational strategies might include giving information verbally, using audiovisual aids, modeling certain types of behaviors, providing reading materials, and offering classes on pregnancy and parenting.

Data from this study and Panzarine's study (1986a) indicate that anticipatory coping is often used by adolescent mothers to avert problems or minimize their impact. The nurse may be able to facilitate anticipatory coping strategies by encouraging pregnant and parenting teens to attend structured groups for new mothers, which should consist primarily of peers in similar socioeconomic situations, so that they will be exposed to a variety of hypothetical situations to which they could learn methods of coping. However, since formal groups are not often utilized by adolescents, the nurse could also facilitate the use of anticipatory coping in the clinical setting by questioning the adolescent about future plans concerning child care, living arrangements, financial needs, and school work. Pregnant adolescents should also be encouraged to talk with friends and relatives in similar situations and, if there are other babies in the household, to perform some of the tasks involved in caring for them.

Since environmental resources may significantly impact the way adolescent mothers appraise and cope with various demands, these resources should be explored prenatally. These might include the availability and accessibility of material support from the father of the baby, public transportation, health care facilities and family planning services, affordable child care, educational programs that are designed for teenage mothers, and offices of public assistance. Referrals to social workers and other social service agencies may be indicated.

Whenever possible, the adolescent mother should be encouraged to participate in an interdisciplinary care setting which provides a combination of medical, psychosocial, and nutritional services to pregnant and parenting teens. A study performed by Elster, Lamb, Tavare, and Ralston (1987) demonstrated that individuals who were involved in this type of interdisciplinary care setting were associated with better composite measures encompassing medical, psychosocial, and parenting events than individuals in control groups at 12 and 26 months after delivery.

In-hospital postpartum care should include early discharge planning in collaboration with the adolescent, her primary sources of support, and with representatives from all of the services that have been involved in the adolescent's care. The primary nurse, who is most aware of all aspects of the client's needs, should be responsible for developing the plan and

coordinating the process. Discharge planning should encompass an assessment of the anticipated post-hospital needs of the client, the identification of problems that might exist, the determination of objectives, and the planning of strategies that will meet these objectives (Kelly & McClelland, 1985).

Another in-hospital strategy that will help the new mother adapt to her maternal role is early and frequent maternal-infant contact (Mercer, 1981). This strategy not only allows the new mother to become familiar with handling and caring for her newborn, it also allows the nurse to frequently observe maternal-infant interactions, and to educate the mother, both verbally and through modeling, on desirable parenting behaviors.

Ideally, after discharge, continuous follow-up evaluation and care would be provided to these young mothers and their infants, via the interdisciplinary care setting, throughout the early years of parenthood. However, regardless of the care setting, the adolescent mother should be accompanied by her infant for each follow-up appointment to ensure comprehensive assessment and care of the mother and child as a unit. At each visit, the mother should be reevaluated regarding her somatic health, psychological well-being, social functioning, and the quality of her interactions with her infant. Appropriate parenting behaviors should be positively reinforced. Social supports should also be reevaluated. The strategies that the

mother uses to cope with various problems or situations should be assessed; situations that involve child care, financial and material needs, interpersonal relationships, and education. The adolescent's perception of the effectiveness of these coping strategies in mediating the effects of stress must also be evaluated, and if they are not perceived as effective, the teaching of alternative strategies may be indicated. If necessary, referrals to appropriate supportive services should be provided.

Recommendations for Research

This study was primarily descriptive in nature. To increase the generalizability of findings, further research in this area could use random sampling and employ inferential statistics to test for within group differences in coping strategies and perceived social support at each point in time. In addition, this study only looked at coping strategies and perceived social support from the last trimester of pregnancy to six months postpartum. Due to the dynamic nature of coping, and the evidence in the literature that social support may decline between 8 and 12 months postpartum, additional research that looks at these variables across a longer span of time is indicated.

This study looked at only three variables that may impact

the types of coping strategies used by adolescent mothers: maternal age and changes in two dimensions of social support. Also, only two variables that may impact satisfaction with social support and/or the frequency of received socially supportive behaviors were measured in this study: the presence or absence of maternal contact with the fathers of the babies, and maternal age. Due to the complexity of the constructs of stress, coping, and social support, further research is indicated that identifies and examines other variables that may affect these processes. Regarding the lack of variance in maternal age in this study's sample, other researchers might consider using stratified random sampling to ensure an equitable distribution of maternal ages in their samples.

Although this study described the types of strategies used by adolescent mothers to cope with the demands associated with anticipated and actual parenthood at three points in time, it did not attempt to identify whether the use of certain types of coping strategies were associated with better maternal outcomes than others. Since the types of coping strategies that are used by adolescent mothers may be an important link between the impact of environmental demands and maternal adaptation, it is important that nurses learn which coping strategies to foster. Consequently, further research is indicated that identifies and operationally defines criteria for positive maternal outcomes, and examines the relationships between specific coping

strategies and these outcomes.

Summary

Although this study was primarily descriptive in nature, the information that resulted from these analyses does provide some insight into the types of strategies used by low-income primiparous adolescents to cope with the demands associated with impending and actual parenthood, the changes that occur in coping strategies from the last trimester of pregnancy to six months postpartum, the types of socially supportive behaviors that are received by adolescent mothers, and how adolescent mothers perceive the frequency of their received supportive behaviors. In addition, data from this study demonstrated that a change in the frequency of received socially supportive behaviors may be associated with a change in the use of certain types of coping strategies. This information is important to nursing knowledge and practice as they apply to pregnant and parenting adolescents, and to the development of other studies that examine this population in regard to stress, coping, and maternal adaptation.

APPENDIX A: LETTER OF AGREEMENT TO BORROW DATA

Data Rights Agreement

1. Karen McClure has permission to use data from the Panzarine teenage mother project for her thesis in the manner set forth in the thesis proposal. The ownership of these data reside with Dr. Panzarine and cannot be released to anyone by Ms. McClure.

2. Any publications or presentations in which thesis findings are shared, would include Dr. Panzarine as second author (with McClure as first author).

3. Any publication drafts must be reviewed by Dr. Panzarine before submission.

Signatures/Dates: Karen J McClure 19 May 87

for Panzarine 19 May 87

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APPENDIX B: RESEARCH INSTRUMENTS

Coping With Motherhood - Prenatal

Instruction: Please circle the number which best shows what you have done or thought in the past month when dealing with the fact that you are soon to be caring for your new baby.

		Does not apply/not at all	A little bit	A lot	Almost all the time
1.	I thought of people who could help me with the baby.	1	2	3	4
2.	I thought out the different things I could do to help me deal with my problems.	1	2	3	4
3.	I looked forward to when the baby would be a bit older.	1	2	3	4
4.	I thought about the good things of being a mother.	1	2	3	4
5.	I tried to ignore things for awhile.	1	2	3	4
6.	I did something to take my mind off things for awhile, like watch TV, talk on the phone, listen to music, etc.	1	2	3	4
7.	I let off steam by crying.	1	2	3	4
8.	I talked with my family about how I felt.	1	2	3	4
9.	I read about what being a mother would be like or about what to do with the baby.	1	2	3	4

		Does not apply/not at all	A little bit	A lot	Almost all the time
10.	I wished things were different.	1	2	3	4
11.	I told myself that I really was not missing anything	1	2	3	4
12.	I tried not to respond to the baby's crying right away	1	2	3	4
13.	I thought about other things to take my mind off the situation for awhile.	1	2	3	4
14.	I let off steam by complaining about things	1	2	3	4
15.	I talked with my friends about how I felt.	1	2	3	4
16.	I watched others do the things that I would have to do.	1	2	3	4
17.	I daydreamed about how things may turn out.	1	2	3	4
18.	I knew there would be no need to worry because I had taken care of babies before.	1	2	3	4
19.	I tried not to think about things for awhile.	1	2	3	4
20.	I smoked cigarettes more.	1	2	3	4
21.	I talked with my boyfriend/husband about how I felt.	1	2	3	4

		Does not apply/not at all	A little bit	A lot	Almost all the time
22.	I tried to look at the situation without letting my feelings get in the way.	1	2	3	4
23.	I wished that I could change how I feel.	1	2	3	4
24.	I just accepted it because there is nothing that can be done.	1	2	3	4
25.	I tried to keep busy to keep my mind off my problems.	1	2	3	4
26.	I blamed others for things that went wrong.	1	2	3	4
27.	I talked with my family so they could tell me that what I doing was right.	1	2	3	4
28.	I thought back to what I did when caring for other babies.	1	2	3	4
29.	I wished that the baby would go away for awhile.	1	2	3	4
30.	I thought of things to make myself feel better.	1	2	3	4
31.	I tried to be alone.	1	2	3	4
32.	I used drugs.	1	2	3	4
33.	I talked with my boyfriend/husband so that he could tell me what I was doing was right.	1	2	3	4
34.	I practiced the things I would need to do.	1	2	3	4

		Does not apply/not at all	A little bit	A lot	Almost all the time
35.	I hoped a miracle would happen.	1	2	3	4
36.	I thought of reasons why it is important to go through the hard parts of being a mother.	1	2	3	4
37.	I tried to stay away from situations with the baby that made me feel bad.	1	2	3	4
38.	I drank beer, wine, or liquor.	1	2	3	4
39.	I talked with my doctor or nurse so they could tell me that what I was doing was right.	1	2	3	4
40.	When I found something that worked with the baby, I tried to use it the next time	1	2	3	4
41.	I thought of how much I wanted this baby.	1	2	3	4
42.	I tried to get away from things for awhile by going shopping, visiting, etc.	1	2	3	4
43.	I got angry and yelled at someone.	1	2	3	4
44.	I asked others to babysit so I could get away for awile.	1	2	3	4
45.	I talked to my minister/priest/ or rabbi.	1	2	3	4

		Does not apply/not at all	A little bit	A lot	Almost all the time
46.	I tried out different things to deal with a situation.	1	2	3	4
47.	I thought of what I had to do in terms of one step at a time.	1	2	3	4
48.	I tried not to think about the hard parts of being a mother.	1	2	3	4
49.	I tried to go on as if nothing had changed.	1	2	3	4
50.	I got angry and hit someone.	1	2	3	4
51.	I tried not to let things I had to do pile up on me.	1	2	3	4
52.	I thought of how much easier the baby would get as he/she got older.	1	2	3	4
53.	I reminded myself that the hard parts of being a mother would soon be over.	1	2	3	4
54.	I got somebody to help me take care of the baby.	1	2	3	4
55.	I waited until someone was around to help me before I did things with the baby.	1	2	3	4
56.	I went over in my mind what I would do with the baby.	1	2	3	4
57.	I thought of how much I loved my baby.	1	2	3	4

		Does not apply/not at all	A little bit	A lot	Almost all the time
58.	I thought of others who had it worse than me.	1	2	3	4
59.	I tried to keep up my friendships.	1	2	3	4
60.	I tried to be flexible about what I had to do and when.	1	2	3	4
61.	I thought of how much I have grown as a person.	1	2	3	4
62.	I went to a group for new mothers.	1	2	3	4
63.	I talked with other new mothers.	1	2	3	4
64.	I tried to make new friends.	1	2	3	4

Social Support

Instructions: Listed below are some things that others might have done for you this past month. Please circle the number which best shows how often these things happened to you this past month. Then, below each item, circle the number which shows whether or not this amount of help was enough.

This past month, someone:

	not at all	once or twice	about once a week	several times a week	about every day
1. Let you know that you did something well.	1	2	3	4	5

Would you have liked:
1 = more of this help
2 = less of this help
3 = it was about right

2. Told you that you are OK just the way you are.	1	2	3	4	5

Would you have liked:
1 = more of this help
2 = less of this help
3 = it was about right

3. Provided you with a place where you could get away for awhile.	1	2	3	4	5

Would you have liked:
1 = more of this help
2 = less of this help
3 = it was about right

4. Gave you some information on how to do something	1	2	3	4	5

	not at all	once or twice	about once a week	several times a week	about every day
Would you have liked: 1 = more of this help 2 = less of this help 3 = it was about right					
5. Let you know he/she respected something you could do.	1	2	3	4	5
Would you have liked: 1 = more of this help 2 = less of this help 3 = it was about right					
6. Comforted you by showing you some physical affection.	1	2	3	4	5
Would you have liked: 1 = more of this help 2 = less of this help 3 = it was about right					
7. Watched after your things when you were away (pets, plants, home, apartment, etc.)	1	2	3	4	5
Would you have liked: 1 = more of this help 2 = less of this help 3 = it was about right					
8. Suggested some action that you should take.	1	2	3	4	5
Would you have liked: 1 = more of this help 2 = less of this help 3 = it was about right					

	not at all	once or twice	about once a week	several times a week	about every day
9. Agreed that what you wanted to do was right.	1	2	3	4	5

Would you have liked:
1 = more of this help
2 = less of this help
3 = it was about right

10. Listened to you talk about your private feelings.	1	2	3	4	5

Would you have liked:
1 = more of this help
2 = less of this help
3 = it was about right

11. Gave you some money.	1	2	3	4	5

Would you have liked:
1 = more of this help
2 = less of this help
3 = it was about right

12. Gave you some information to help you understand a situation you were in.	1	2	3	4	5

Would you have liked:
1 = more of this help
2 = less of this help
3 = it was about right

13. Let you know he/she respected a personal quality of yours.	1	2	3	4	5

	not at all	once or twice	about once a week	several times a week	about every day
Would you have liked: 1 = more of this help 2 = less of this help 3 = it was about right					
14. Told you how he/she felt in a situation similar to yours.	1	2	3	4	5
Would you have liked: 1 = more of this help 2 = less of this help 3 = it was about right					
15. Provided you with some transportation.	1	2	3	4	5
Would you have liked: 1 = more of this help 2 = less of this help 3 = it was about right					
16. Helped you understand why you did not do something well.	1	2	3	4	5
Would you have liked: 1 = more of this help 2 = less of this help 3 = it was about right					
17. Let you know that he/she will always be around if you need help.	1	2	3	4	5
Would you have liked: 1 = more of this help 2 = less of this help 3 = it was about right					

	not at all	once or twice	about once a week	several times a week	about every day
18. Loaned or gave you something (a physical object other than money) that you needed.	1	2	3	4	5

Would you have liked:
1 = more of this help
2 = less of this help
3 = it was about right

19. Told you who you should see for help.	1	2	3	4	5

Would you have liked:
1 = more of this help
2 = less of this help
3 = it was about right

20. Expressed interest and concern in you.	1	2	3	4	5

Would you have liked:
1 = more of this help
2 = less of this help
3 = it was about right

21. Loaned you some money.	1	2	3	4	5

Would you have liked:
1 = more of this help
2 = less of this help
3 = it was about right

22. Taught you how to do something.	1	2	3	4	5

Would you have liked:
1 = more of this help
2 = less of this help
3 = it was about right

	not at all	once or twice	about once a week	several times a week	about every day
23. Told you that he/she feels very close to you.	1	2	3	4	5

Would you have liked:
1 = more of this help
2 = less of this help
3 = it was about right

24. Provided you with a place to stay.	1	2	3	4	5

Would you have liked:
1 = more of this help
2 = less of this help
3 = it was about right

25. Helped you in setting a goal for yourself.	1	2	3	4	5

Would you have liked:
1 = more of this help
2 = less of this help
3 = it was about right

26. Joked and kidded to try to cheer you up.	1	2	3	4	5

Would you have liked:
1 = more of this help
2 = less of this help
3 = it was about right

27. Pitched in to help you do something that needed to get done.	1	2	3	4	5

	not at all	once or twice	about once a week	several times a week	about every day
Would you have liked: 1 = more of this help 2 = less of this help 3 = it was about right					
28. Made it clear what was expected of you.	1	2	3	4	5
Would you have liked: 1 = more of this help 2 = less of this help 3 = it was about right					
29. Said things that made your situation clearer to you.	1	2	3	4	5
Would you have liked: 1 = more of this help 2 = less of this help 3 = it was about right					
30. Showed you how to do something.	1	2	3	4	5
Would you have liked: 1 = more of this help 2 = less of this help 3 = it was about right					
31. Watched you while you did something to let you know if you were doing it right.	1	2	3	4	5
Would you have liked: 1 = more of this help 2 = less of this help 3 = it was about right					

	not at all	once or twice	about once a week	several times a week	about every day
32. Told you what to expect in a situation that was about to happen.	1	2	3	4	5

Would you have liked:
1 = more of this help
2 = less of this help
3 = it was about right

APPENDIX C: HUMAN VOLUNTEERS CONSENT FORM

THE UNIVERSITY OF MARYLAND

SCHOOL OF MEDICINE
Department of Pediatrics

Division of Adolescent Medicine

COPING AND MATERNAL ADAPTATION IN ADOLESCENTS

Susan Panzarine, R.N., Ph.D.
528-6496

Consent Form

I am willing to take part in this research study conducted by Susan Panzarine, R.N., Ph.D. I understand that the purpose of this study is to learn more about the ways in which a new mother copes with parenthood and taking care of her baby.

I understand that I will meet with either Dr. Panzarine or her assistant either in the hospital or in my home during the last part of my pregnancy, and at one, six, and twelve months after my baby has been born, if my infant has no major health problems. During these visits, I will fill out questionnaires, and will be observed while I give my baby a feeding and teach him or her a task. These visits will take about two-and-a-half hours. I understand that my answers will be used for statistical purposes only, and that they will be kept confidential. I understand that my name will not be used on any form that I fill out or in any publication from this study.

I have been given an opportunity to ask questions about my participation in the study. I know that I can withdraw from the study at any time, and if I do, it will in no way affect the care I receive from the University of Maryland Hospital.

I understand that the only possible risk of taking part in this study is that I may become anxious when answering items on the questionnaires. However, I know that I can refuse to answer any questions at any time. Information regarding research can be obtained from the Human Volunteers Coordinator, HUMAN VOLUNTEERS RESEARCH COMMITTEE, UMAB, Room 14-002, 655 West Baltimore Street, Baltimore, Maryland 21201; (301) 528-5037. I have been offered a copy of this consent form.

_____ _____
DATE SIGNATURE OF SUBJECT

_____ _____
DATE SIGNATURE OF INVESTIGATOR

_____ _____
DATE SIGNATURE OF WITNESS

CAMPUS FOR THE PROFESSIONS
Room N8W68 North Hospital Building
22 South Greene Street
Baltimore, Maryland 21201 (301) 528-6495

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